This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

B222080

AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

TENTH ANNUAL MEETING
ASHEVILLE
1919

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

TRANSACTIONS OF THE TENTH ANNUAL MEETING

ASHEVILLE, N. C., NOVEMBER 11-13, 1919

HEADQUARTERS OF THE ASSOCIATION
1211 CATHEDRAL STREET, BALTIMORE, MD.

ALBANY
J. B. LYON COMPANY, PRINTERS
1920

Digitized by Google

Digitized by Google

TABLE OF CONTENTS

PAGE

Directors and Committees, 1918–1919 ..... 7, 8
Directors, 1919–1920 9
Minutes of Annual Meeting 11
Financial Statement 15
Statement of Membership 16

Addresses:

By the President, S. Josephine Baker, M. D.; D. P. H. 21
The Imperative Need of Safe-guarding Maternity and Infancy, Julia C. Lathrop 29

Sessions:

Prenatal and Maternal Care 35
Introduction by the Chairman, J. L. Huntington, M. D. 37
The Maternity Problem in New York City, Ralph W. Lobenstine, M. D. 39
The Work of the Maternity Center Association, Anne A. Stevens, R. N. 43
Discussion 63
Prenatal Care in Massachusetts, Robert L. De Normandie, M. D. 64
Maternal Benefits, Merrill E. Champion, M. D. 71
Discussion 79

Infant Care 87
Report of Breast Feeding Bureau at Minneapolis, J. P. Sedgwick, M. D. 89
Discussion 100
How May the General Practitioner Be Interested in the Modern Socio-Medical Program for Infancy, Richard A. Bolt, M. D. 106
Joseph S. Wall, M. D. 110
Discussion 114
Help in the Home for the Mother with a Young Baby, Helen MacMurchy, M. D. 122
Discussion 128
An Infant Hygiene Campaign of the Second Century, John A. Foote, M. D. 129

Pre-School Age 141
What England and Scotland are Doing for Children of Pre-School Age, Wm. Palmer Lucas, M. D. 143
Observations on the Supervision of the Pre-School Age, W. H. O. Hoffmann, M. D. 153
Correctable Defects Under Six Years of Age, Adelaide Brown, M. D. 157
Discussion 160

Digitized by Google

PAGE

School Age and Adolescence 169
Introduction by the Chairman, Taliaferro Clark, M. D..... 171
Psychiatry, with Special Reference to Children of School Age, Walter L. Treadway, M. D..... 172
Discussion 177
Alias Hygiene, Thomas Storey, M. D..... 182
Oral Hygiene, Major Harry B. Butler..... 186
Discussion 190

Nursing and Social Work..... 195
General Outline of Welfare Work for the Child, from 2 to 6, from the Viewpoint of the City, Sara B. Place, R. N..... 197
From the Viewpoint of the Rural Community, Mrs. Virginia Knox Kimble, R. N..... 207
The Child Welfare Special, Janet Geister, R. N..... 214
Discussion 222
Statement of the 1919–1920 Program of the National Organization for Public Health Nursing, Zoe La Forge, R. N..... 225

Rural Problems 227
Rural, Dental and Surgical Clinics, George M. Cooper, M. D..... 229
Discussion 234
Opportunities of the Rural Public Health Nurse, Mrs. Ruth A. Dodd, R. N..... 237
Discussion 242
The Minnesota Rural Clinics, E. J. Huenekens, M. D..... 245
Discussion 249

Reports of Affiliated Societies..... 253
Constitution and By-Laws..... 309
Membership List 315
Index 341

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

OFFICERS

1918–1919

President, Dr. S. Josephine Baker, New York
President-elect (1920) Dr. Philip Van Ingen, New York
Vice-Presidents, Dr. Wm. Palmer Lucas, San Francisco, Dr. W. S. Rankin, Raleigh
Secretary, Dr. Henry F. Helmholz, 800 Davis Street, Evanston, Ill.
Treasurer, Mr. Austin McLanahan, of Alex. Brown & Sons, Baltimore
Executive Secretary, Miss Gertrude B. Knipp

Executive Office, 1211 Cathedral Street, Baltimore, Maryland

Directors

(Grouped according to years in which terms expire)

1919

Dr. S. Josephine Baker, New York
Mr. George R. Bedinger, Detroit
Dr. W. W. Butterworth, New Orleans
Dr. Charles V. Chapin, Providence
Dr. F. S. Churchill, Boston
Dr. A. B. Emmons, 2nd, Boston
Miss M. F. Etchberger, Baltimore
Dr. C. E. Ford, New York
Dr. C. L. Furbush, Philadelphia
Dr. Caroline Hedger, Chicago
Dr. Wm. Palmer Lucas, San Francisco
Dr. Helen MacMurchy, Toronto
Mr. Harold McCormick, Chicago
Dr. F. W. Schlutz, Minneapolis
Dr. George M. Tuttle, St. Louis
Dr. Borden S. Veeder, St. Louis
Dr. Wm. H. Welch, Baltimore

1920

Miss Minnie H. Ahrens, Chicago
Dr. W. N. Bradley, Philadelphia
Dr. T. B. Cooley, Detroit
Prof. Irving Fisher, New Haven
Mrs. Philip B. Fouke, St. Louis
Dr. J. Morton Howell, Dayton
Dr. J. L. Huntington, Boston
Prof. Abby L. Marlatt, Madison
Dr. Thomas C. McCleave, Berkeley
Mrs. Duncan McDuffie, Berkeley
Dr. Lenna Meanes, Des Moines
Dr. Helen C. Putnam, Providence
Dr. J. Gurney Taylor, Milwaukee
Dr. C. E. Terry, New York
Dr. J. Whitridge Williams, Baltimore
Dr. Linsly R. Williams, Albany
Dr. J. H. Young, Boston

1921

Dr. Isaac A. Abt, Chicago
Mr. Albert Cross, Philadelphia
Dr. Hoyt E. Dearholt, Milwaukee
Miss Edna Foley, Chicago
Mr. Homer Folks, New York
Dr. F. E. Fronczak, Buffalo
Dr. Henry F. Helmholz, Chicago
Dr. Frances Hollingshead, Columbus
Dr. L. Emmett Holt, New York
Dr. John Howland, Baltimore
Dr. J. N. Hurty, Indianapolis
Mr. Sherman C. Kingsley, Cleveland
Miss Harriet L. Leete, Cleveland
Dr. Julius C. Levy, Newark, N. J.
Dr. J. W. Schereschewsky, Washington
Dr. J. P. Sedgwick, Minneapolis
Prof. C.-E. A. Winslow, New Haven

1922

Miss Ellen C. Babbit, Philadelphia
Dr. Richard A. Bolt, Cleveland
Dr. Alan Brown, Toronto
Dr. H. J. Gerstenberger, Cleveland
Dr. Clifford Grulee, Chicago
Dr. S. McC. Hamill, Philadelphia
Dr. J. H. Mason Knox, Jr., Baltimore
Miss Julia C. Lathrop, Washington
Dr. McGuire Newton, Richmond
Dr. Langley Porter, San Francisco
Dr. W. S. Rankin, Raleigh
Dr. L. T. Royster, Norfolk
Dr. H. L. K. Shaw, Albany
Dr. Mary Sherwood, Baltimore
Mrs. Letchworth Smith, Louisville
Dr. Philip Van Ingen, New York
Dr. Joseph S. Wall, Washington

1923

Dr. Wilmer R. Batt, Harrisburg
Dr. Adelaide Brown, San Francisco
Dr. Howard Childs Carpenter, Philadelphia
Dr. Taliaferro Clark, Washington
Dr. John S. Fulton, Baltimore
Dr. Hastings H. Hart, New York
Dr. B. Raymond Hoobler, Detroit
Mrs. James L. Houghteling, Chicago
Dr. E. J. Huenekens, Minneapolis
Mr. Austin McLanahan, Baltimore
Miss Frances Perkins, New York
Mrs. William Lowell Putnam, Boston
Dr. Herman Schwarz, New York
Dr. Richard M. Smith, Boston
Miss Estelle L. Wheeler, Boston
Dr. Wm. C. Woodward, Boston

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

COMMITTEES

1918–1919

Executive

Dr. S. Josephine Baker, New York
Dr. Henry F. Helmholz, Chicago
Miss Minnie H. Ahrens, Chicago
Dr. S. McC. Hamill, Philadelphia
Dr. J. H. Mason Knox, Jr., Baltimore
Dr. Julius Levy, Newark
Dr. Langley Porter, San Francisco
Mrs. William Lowell Putnam, Boston
Dr. J. P. Sedgwick, Minneapolis
Dr. Philip Van Ingen, New York

Prenatal and Maternal Care

Chairman, Dr. James Lincoln Huntington, Boston
Vice-Chairman, Dr. Alice Weld Tallant, Philadelphia

Dr. Arthur B. Emmons, 2nd, Boston
Dr. Ralph W. Lobensteine, New York
Dr. Robert L. DeNormandie, Boston
Dr. Jacob Newman, New Orleans
Dr. Mary Sherwood, Baltimore

Infant Care

Chairman, Dr. Alan Brown, Toronto

Dr. Richard A. Bolt, Oakland, Cal.
Dr. Helen MacMurchy, Toronto
Dr. Mary Sherwood, Baltimore
Dr. Richard M. Smith, Boston
Dr. Joseph S. Wall, Washington

Pre-School Age

Chairman, Dr. Fritz B. Talbot, Boston

School Age and Adolescence

Chairman, Dr. Taliaferro Clark, Washington

Dr. W. S. Rankin, Raleigh
Dr. E. A. Petersen, Cleveland
Dr. Thomas A. Storey
Dr. Lydia A. DeVilbiss, Topeka

Nursing and Social Work

Chairman, Miss Estelle L. Wheeler, Washington

Miss Grace Anderson, St. Louis
Miss Mary Arnold, New York City
Miss Pansy V. Besom, Boston
Miss M. F. Etchberger, Baltimore
Miss W. L. Fitzpatrick, Providence
Miss Janet M. Geister, Washington, D. C.
Miss Emma E. Grettinger, Seattle
Mrs. Virginia K. Kimble, Topeka
Miss Zoe La Forge, Washington, D. C.
Miss Mary A. Mackay, Denver
Miss Sara B. Place, Chicago
Miss Mary Powers, Toronto
Miss Elisabeth Shaver, Boston

Rural Problems

Chairman, Dr. W. S. Rankin, Raleigh

Organization and Extension

Chairman, Dr. Howard Childs Carpenter, Philadelphia

Miss Minnie H. Ahrens, Chicago
Dr. S. Josephine Baker, New York City
Dr. Clifford G. Grulee, Chicago
Dr. S. McC. Hamill, Philadelphia
Dr. Henry F. Helmholz, Chicago
Dr. James Lincoln Huntington, Boston
Dr. J. H. Mason Knox, Jr., Baltimore
Dr. Julius C. Levy, Newark
Mrs. William Lowell Putnam, Boston
Dr. J. P. Sedgwick, Minneapolis

Vital and Social Statistics

Chairman, Dr. Wm. H. Davis, Washington

Dr. F. V. Beitler, Baltimore
Dr. W. J. V. Deacon, Topeka
Mrs. Etta R. Goodwin, New York City
Dr. Wm. H. Guilfoy, New York City
Dr. Robert M. Woodbury, Washington, D. C.

Educational Leaflet and Booklet

Chairman, Dr. H. J. Gerstenberger, Cleveland

Conservation of the Milk Supply

Chairman, Mr. J. H. Larson, New York City

Legislation

Chairman, Dr. Herman Schwarz, New York City

Procedure and Record Forms for Prenatal Work

Chairman, Dr. J. Whitridge Williams, Baltimore

Procedure and Record Forms for Post-natal Work

Chairman, Dr. J. H. Mason Knox, Jr., Baltimore

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

OFFICERS

1919–1920

President, Dr. Philip Van Ingen, New York
President-elect (1921) Dr. H. L. K. Shaw, Albany
Vice-Presidents, Dr. W. W. Chipman, Montreal; Dr. Howard Childs Carpenter, Philadelphia
Secretary, Dr. Henry F. Helmholz, 800 Davis Street, Evanston, Ill.
Treasurer, Mr. Austin McLanahan, of Alex. Brown & Sons, Baltimore

Executive Staff

General Director; Dr. Richard A. Bolt
Asst. General Director and Executive Secretary, Miss Gertrude B. Knipp
Field Director, Miss Harriet L. Leete
Publicity Director, Miss Ellen C. Babbitt
Executive Office, 1211 Cathedral Street, Baltimore, Maryland

Directors

(Grouped according to years in which terms expire)

1920

Miss Minnie H. Ahrens, Chicago
Dr. W. N. Bradley, Philadelphia
Dr. T. B. Cooley, Detroit
Prof. Irving Fisher, New Haven
Mrs. Philip B. Fouke, St. Louis
Dr. J. Morton Howell, Dayton
Dr. J. L. Huntington, Boston
Prof. Abby L. Marlatt, Madison
Dr. Thomas C. McCleave, Berkeley
Mrs. Duncan McDuffie, Berkeley
Dr. Lenna Meanes, Des Moines
Dr. Helen C. Putnam, Providence
Dr. J. Gurney Taylor, Milwaukee
Dr. C. E. Terry, New York
Dr. J. Whitridge Williams, Baltimore
Dr. Linsly R. Williams, Albany
Dr. J. H. Young, Boston

1921

Dr. Isaac A. Abt, Chicago
Dr. Hoyt E. Dearholt, Milwaukee
Miss Edna Foley, Chicago
Mr. Homer Folks, New York
Dr. F. E. Fronczak, Buffalo
Dr. Henry F. Helmholz, Chicago
Dr. Frances Hollingshead, Columbus
Dr. L. Emmett Holt, New York
Dr. John Howland, Baltimore
Dr. J. N. Hurty, Indianapolis
Mr. Sherman C. Kingsley, Cleveland
Miss Harriet L. Leete, Cleveland
Dr. Julius C. Levy, Newark, N. J.
Dr. J. W. Schereschewsky, Washington
Dr. J. P. Sedgwick, Minneapolis
Dr. Alice Weld Talliant, Philadelphia
Prof. C.-E. A. Winslow, New Haven

1922

Miss Ellen C. Babbitt, Washington
Dr. Richard A. Bolt, Cleveland
Dr. Alan Brown, Toronto
Dr. H. J. Gerstenberger, Cleveland
Dr. Clifford Grulee, Chicago
Dr. S. McC. Hamill, Philadelphia
Dr. J. H. Mason Knox, Jr., Baltimore
Miss Julia C. Lathrop, Washington
Dr. McGuire Newton, Richmond
Dr. Langley Porter, San Francisco
Dr. W. S. Rankin, Raleigh
Dr. L. T. Royster, Norfolk
Dr. H. L. K. Shaw, Albany
Dr. Mary Sherwood, Baltimore
Mrs. Letchworth Smith, Louisville
Dr. Philip Van Ingen, New York
Dr. Joseph S. Wall, Washington

1923

Dr. Wilmer R. Batt, Harrisburg
Dr. Adelaide Brown, San Francisco
Dr. Howard Childs Carpenter, Philadelphia
Dr. Taliaferro Clark, Washington
Dr. John S. Fulton, Baltimore
Dr. Hastings H. Hart, New York
Dr. B. Raymond Hoobler, Detroit
Mrs. James L. Houghteling, Chicago
Dr. E. J. Huenekens, Minneapolis
Dr. Heber C. Jamieson, Edmonton, Can.
Mr. Austin McLanahan, Baltimore
Miss Frances Perkins, New York
Mrs. William Lowell Putnam, Boston
Dr. Herman Schwarz, New York
Dr. Richard M. Smith, Boston
Miss Estelle L. Wheeler, Boston
Dr. Wm. C. Woodward, Boston

1924

Dr. Fred L. Adair, Minneapolis
Dr. S. Josephine Baker, New York
Mr. George R. Bedinger, New York
Dr. Charles V. Chapin, Providence
Dr. W. W. Chipman, Montreal
Dr. Oscar Dowling, New Orleans
Dr. A. B. Emmons, 2nd, Boston
Miss M. F. Etchberger, Baltimore
Dr. Charles A. Fife, Philadelphia
Dr. Jas. R. Garber, Birmingham
Dr. Caroline Hedger, Chicago
Dr. Wm. Palmer Lucas, San Francisco
Dr. Helen MacMurchy, Toronto
Dr. Wm. A. Mulherin, Augusta, Ga.
Dr. Fritz B. Talbot, Boston
Dr. Borden S. Veeder, St. Louis
Dr. Wm. H. Welch, Baltimore

Executive Committee

Dr. Philip Van Ingen, New York
Dr. Henry F. Helmholz, Chicago
Miss Minnie H. Ahrens, Chicago
Dr. S. Josephine Baker, New York
Dr. Howard Childs Carpenter, Philadelphia
Dr. W. W. Chipman, Montreal
Dr. S. McC. Hamill, Philadelphia
Dr. J. H. Mason Knox, Jr., Baltimore
Dr. Wm. Palmer Lucas, San Francisco
Mrs. William Lowell Putnam, Boston
Dr. H. L. K. Shaw, Albany
Dr. Alice Weld Talliant, Philadelphia
Dr. Joseph S. Wall, Washington, D. C.

Digitized by Google

Digitized by Google

TENTH ANNUAL MEETING

OF THE

AMERICAN CHILD HYGIENE ASSOCIATION

Formerly American Association for Study and Prevention of Infant Mortality.

The Tenth Annual Meeting of the Association, and the first under its new name — American Child Hygiene Association — took place at Asheville, N. C., November 11–13, 1919, under the presidency of Dr. S. Josephine Baker. The meeting was held concurrently with that of the Southern Medical Association. The program was arranged by the following committees:—

Prenatal and Maternal Care.
Infant Care.
Pre-school Age.
School Age and Adolescence.
Nursing and Social Work.
Rural Problems.

The annual meeting of the Executive Committee and of the Directors took place on Monday, November 10. Other meetings were held November 11 and November 12, at the call of the President. The meeting for organization of the incoming Executive Committee took place Wednesday evening, November 12.

Registration and Headquarters

Through the courtesy of the Southern Medical Association joint headquarters for registration and information were provided in the main building of the Asheville Young Men's Christian Association. The general sessions and the business meetings took place at the Methodist Church.

Sessions

The sessions took place as follows:

Monday, November 10:

Section on Pediatrics of the Southern Medical Association. Participation by invitation.

Tuesday, November 11:

9:30 A. M. Opening session: Address by the President, Dr. S. Josephine Baker, Director, Bureau of Child Hygiene, Department of Health, New York City.

Digitized by Google

10:30 A. M. Prenatal and Maternal Care. Chairman, Dr. James Lincoln Huntington, Boston; Vice-chairman, Dr. Alice Weld Tallant, Philadelphia.
2:30 P. M. Infant Care. Chairman, Dr. Alan Brown, Toronto.
8:00 P. M. Joint General Session with the Southern Medical Association.

Wednesday, November 12:

9:30 A. M. Business meeting, Dr. Philip Van Ingen presiding.
Report of Committee on Amendment of the Constitution and By-Laws, Dr. Van Ingen, Chairman.
Reports of Affiliated Societies.
10:30 A. M. Nursing and Social Work. Chairman, Miss Estelle L. Wheeler, R. N., Brookline, Mass.
2:30 P. M. Pre-school Age. Chairman, Dr. Fritz B. Talbot, Boston.

Thursday, November 13:

9:30 A. M. Business meeting, Dr. Baker presiding.
Report of Nominating Committee.
Reports of affiliated societies (continued).
10:30 A. M. School Age and Adolescence. Chairman, Dr. Taliaferro Clark, Assistant Surgeon-General, United States P. H. Service, Washington.
2:00 P. M. Rural Problems. Joint session with Southern Medical Association. Chairman, Dr. W. S. Rankin, Raleigh.

Committees

On motion duly seconded and carried the following committees were appointed by the Chair:

Nominations:

Mrs. William Lowell Putnam, Boston, Chairman.
Dr. Richard A. Bolt, Oakland, Cal.
Dr. Alan Brown, Toronto.
Dr. W. S. Rankin, Raleigh.
Dr. Herman Schwarz, New York.
Dr. Joseph S. Wall, Washington.

Resolutions:

Miss Minnie H. Ahrens, Chicago, Chairman.
Dr. Howard Childs Carpenter, Philadelphia.
Dr. Merrill E. Champion, Boston.

Review and Publication of Transactions:

Mrs. William Lowell Putnam, Boston, Chairman.
Dr. John S. Fulton, Baltimore.

Election of Directors

The following Directors whose terms had expired were elected for a term of five years:

Dr. S. Josephine Baker, New York.
Mr. George R. Bedinger. New York.
Dr. Chas. V. Chapin, Providence.
Dr. A. B. Emmons, 2d, Boston.
Miss M. F. Etchberger, Baltimore.
Dr. Caroline Hedger, Chicago.
Dr. Wm. Palmer Lucas, San Francisco.
Dr. Helen MacMurchy, Toronto.
Dr. Borden S. Veeder, St. Louis.
Dr. Wm. H. Welch, Baltimore.

Digitized by Google

The following new directors were elected for a term of five years:

Dr. Fred. L. Adair, Minneapolis.
Dr. W. W. Chipman, Montreal.
Dr. Oscar Dowling, New Orleans.
Dr. Charles A. Fife, Philadelphia.
Dr. James R. Garber, Birmingham.
Dr. Wm. A. Mulherin, Augusta, Ga.
Dr. Fritz B. Talbot, Boston.

The following were elected for the terms indicated:

Four years: Dr. Heber C. Jamieson, Edmondton, Canada.
Two years: Dr. Alice Weld Tallant, Philadelphia.

Officers for 1919–1920

Dr. Philip Van Ingen, New York City, President-elect was declared President for 1919–1920.

At the meeting of the Board of Directors Wednesday night, November 12, the following officers and Executive Committee were elected:

* President-elect 1921, Professor C. E. A. Winslow, New Haven.
First Vice-President, Dr. W. W. Chipman, Montreal.
Second Vice-President, Dr. Howard Childs Carpenter, Philadelphia.
Secretary, Dr. Henry F. Helmholz, Evanston, Ill.
Treasurer, Mr. Austin McLanahan, Baltimore.
Executive Secretary, Miss Gertrude B. Knipp, Baltimore.

Executive Committee

The President
The President-Elect
The Secretary
Miss Minnie H. Ahrens, Chicago
Dr. S. McC. Hamill, Philadelphia
Dr. J. H. M. Knox, Jr., Baltimore
Dr. William Palmer Lucas, San Francisco
Mrs. William Lowell Putnam, Boston
Dr. H. K. L. Shaw, Albany
Dr. Alice Weld Tallant, Philadelphia

Extension Plans

Announcement of plans for the extension of the work of the Association to include field work and related activities, was made by Dr. Baker in her presidential address (see page 27). The appropriation of $20,000 by the American Red Cross toward the extension work, with the understanding that the Association raise an equal amount for the same purpose, in addition to the $10,000 of the former budget, thereby increasing its working budget to $50,000, was also reported. Two other gifts of $1,000 each, toward the extension work were reported during the meeting.

The plans for the extension work calling for the preparation and carrying out of a working program covering an indefinite period, the necessity for the enlargement of the Executive Committee to insure

* Owing to the pressure of other duties Professor Winslow found it impossible to serve, and Dr. H. L. K. Shaw was elected President-Elect for 1921, at a special meeting of the Board of Directors held in Philadelphia January 17, 1920.

Digitized by Google

the continued services of some of its members for several years, was brought to the attention of the meeting by Dr. Van Ingen. To meet this requirement the following amendment to the By-Laws was proposed: —

Article V, Section 1. The Board of Directors shall appoint an Executive Committee consisting of ten of its members of whom the President, President-elect and Secretary ex-officio, and the retiring President shall be members.

In addition to the above ten members of the Executive Committee, there shall by one member at large, to represent especially the members and affiliated organizations of the Pacific Coast and Far West. This member and the two Vice-Presidents shall be notified of all meetings of the Executive Committee, and if present, shall each have a vote on all subjects.*

Resolutions

The following resolutions were reported favorably by the Committee and were unanimously adopted by the Association:—

Resolved: **That the American Child Hygiene Association ask the American Gynecological Society to appoint a committee to confer with it and advise in the elaboration and development of a Maternal and Child Welfare Program for the U. S. A.**

Whereas: **The Tenth Annual Meeting has been one of marked success, and whereas much of this has been due to the friendly hospitality of the Southern Medical Association, therefore be it**

Resolved: **That the thanks of the Association are hereby expressed to the Southern Medical Association, its officers and its local committees, for their cordial invitation to meet with them and for the true Southern hospitality and co-operation which have characterized all of the arrangements for the meeting and which have established strong ties of friendship between the two organizations.**

The thanks of the Association are also due and are hereby extended to the officers and directors of the Asheville Y. M. C. A. for the courtesies extended and for the use of space for registration headquarters.

The Association also wishes to place on record its indebtedness to the chairmen of committees and to the speakers who have contributed so largely to the success of the meeting.

The incoming President, Dr. Philip Van Ingen was introduced to the Association at the general session on Wednesday morning, November 13.

Twenty-seven states, the District of Columbia and Canada were represented at the meeting. Announcement was made at the closing session that the Eleventh Annual Meeting of the Association would be held in the Fall of 1920, in St. Louis.

*** Adopted at the special meeting of the Directors, Philadelphia, January 17, 1920.**

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

FINANCIAL STATEMENT

October 1, 1918 — September 30, 1919

Balance on hand October 1, 1918					$706.64
RECEIPTS—					
	Arrears 1918	Current 1919	Advance 1920		
Membership—					
Active	$12.00	$2,019.74	$48.29		
Affiliated	5.00	660.00	5.00		
Contributing		710.00	10.00		
Sustaining		375.00			
Life		200.00			
				$4,045.03	
Contributions—					
General		$1,110.00			
Special		830.00			
Extension work		1,000.00			
Transactions		1,344.75			
				4,284.75	
Transactions — Sale of printed copies				292.51	
Exhibit				89.27	
Proceedings of meeting arranged by Lady Aberdeen				18.00	
Refund — postage and expressage on circulars				6.86	
Interest on bank balances				65.27	
Sale of circulars—					
12,700 Motherhood		$90.78			
11,900 Educational Leaflets		70.39			
1,500 Prenatal Care R. Forms		12.00			
300 Postnatal Care R. Forms		3.00			
1,600 Organization B. S. W		10.95			
37,025 Common Cold		119.94		307.06	9,108.75
					$9,815.39
DISBURSEMENTS—					
Salaries				4,030.00	
Multigraphing and Typewriting				102.49	
Transactions of 1918 meeting—					
Printing 1,600 copies		1,209.88			
Postage		146.36			
Wrapping		25.26			
				1,381.50	
Printing — general				684.92	
Postage				513.08	
Office supplies				141.51	
Clerical help				660.00	
Rent				220.00	
Telephone				60.06	
Traveling expenses				347.45	
Exhibit				30.59	
Expressage and telegrams				21.05	
Miscellaneous—					
Advertising in Survey		37.50			
Insurance — Transactions		6.60			
Rent of room for meeting 1/18/19		7.50			
Auditing accounts		22.50			
Janitor service, carfare, etc		56.64		130.74	8,323.30
Balance on hand September 30, 1919					$1,492 00
Exhibit fund				$443.07	
Membership Campaign				200.00	
Extension				848.93	
				$1,492.00	

WILLIAM A. GILLESPIE & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS,
Union Trust Building,
Baltimore, Md.

BALTIMORE, MD., *November* 7, 1919

The American Child Hygiene Association,
1211 *Cathedral Street,*
Baltimore, Maryland.

GENTLEMEN:— In compliance with the request of your Executive Committee, we have made an audit of the accounts of the American Child Hygiene Association for the period ending September 30, 1919, and have found same to be correct, as stated in the accompanying report.

Respectfully submitted.

WAG:AA. (Signed) WILLIAM A. GILLESPIE & CO.

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

MEMBERSHIP 1919

	Life members 1910–1918	Advance for 1919	Paid During 1919		Advance for 1920	
			Arrears for 1918	Current	Old members	New members
Alabama				3		
California		1		24		13
Colorado		1		13		
Connecticut				23		
Delaware				13		
District of Columbia			1	27		
Florida				2		
Georgia						1
Illinois				71		
Indiana				5		
Iowa				10		
Kansas				2		
Kentucky				10		1
Louisiana				10		
Maine				2		
Maryland	5			67		
Massachusetts	1	7		68		
Michigan	1	2		38		
Minnesota	1	2		22		
Mississippi				1		
Missouri	1			21		
Montana				2		
Nebraska				2		
New Hampshire				2		
New Jersey				37		
New Mexico				1		
New York	2	5	1	134		
North Carolina				1		
Ohio	5		1	63	1	
Oklahoma				1		
Oregon				1		
Pennsylvania	3	9		98	1	
Rhode Island	1			5		1
South Carolina				4		
South Dakota				1		
Tennessee				1		
Texas		1		2		
Utah				4		
Vermont				2		
Virginia			1	9		
Washington				2		
West Virginia				5		
Wisconsin	7			25	1	
Canada				18		
Chile		1				
China				1		
Cuba				1		
England			1	1	1	
Hawaii				2		
Panama				1		
Philippine Islands				1		
New Zealand		1		1	1	
Totals	27	30	5	860	5	16

	27
	30
Total for 1919 membership	917

Digitized by Google

	Life members 1910–1918	Paid in advance in 1918 for 1919	Current payment 1919	Advance payment for 1920
Life members	27	.....	1	.....
Sustaining members	.....	2	15	.....
Contributing members	.....	1	64	8
Affiliated societies	.....	3	131	1
Active members	.....	24	649	12
	27	30	860	21
			30	
			27	
Total			917	

Paid-up membership for year ending September 30, 1919

	Arrears	Current	Advance
Active	$12 00	$2,019 75	$48 29
Affiliated	5 00	660 00	5 00
Contributing	.....	710 00	10 00
Sustaining	.....	375 00	.....
Life	.....	200 00	.....
	$17 00	$3,964 74	$63 29

Active	$3 00	Arrears	4
		Current	613
		Advance	6
Active	5 00	Current	36
		Advance	6
Affiliated	.....	Arrears	1
		Current	130
		Advance	1
Irregular	$10 00	Current	1
Contributing	.....	Current	64
		Advance	8
Sustaining	.....	Current	15
Life	.....		1
Total			886

REPORT OF CLERICAL WORK

October 1, 1918 — September 30, 1919

Total pieces of mail sent out	19,637
Personal letters	2,667
Circular letters	7,281
Bills and receipts	2,619
Follow up	1,582
Packages	2,815
Postals	2,673
Booklets:	
Through U. S. P. H. service	3,525
Through office	3,241
Leaflets (Educational No. 1):	
Through orders	20,300
Through office	1,644
Motherhood folders:	
Through orders	9,500
Through office	2,166
Suggestions for Organization of Baby Saving Work:	
Through orders	1,610
Through office	1,619
Prenatal Care Record Forms:	
Through orders	1,500
Through office	1,751

Digitized by Google

Postnatal Care Record Forms:	
Through orders	300
Through office	1,296
Common Cold leaflets:	
Through orders	46,160
Through office	5,726
Membership circulars	2,767
Membership cards	1,620
Reply envelopes	4,738
Transactions slips	415
Recommendations (1917)	315
Recommendations (Infant Care)	1,228
Eugenic reprints	207
Preliminary programs (1918 meeting)	2,588
Final programs (1918 meeting)	3,712

Respectfully submitted,

GERTRUDE B. KNIPP,

Executive Secretary.

Digitized by Google

GENERAL SESSIONS

ADDRESSES

19

Digitized by Google

Digitized by Google

PRESIDENTIAL ADDRESS *

TO THE

AMERICAN CHILD HYGIENE ASSOCIATION

S. JOSEPHINE BAKER, M. D., D. P. H.,

Director, Bureau Child Hygiene, Department of Health, New York City

In welcoming the members of the American Child Hygiene Association to their Tenth Annual Meeting, I have a double pleasure, first, in offering the hearty congratulations to which you are all entitled on the completion of ten years of pioneer and unsurpassed service to the babies of the nation and, second, in calling your attention to the forward-looking task we are entering upon in our proposed service to children of all ages.

On January 18, 1919, the American Association for Study and Prevention of Infant Mortality recognized that it had paved the way for future achievement in a wider field and also that the time had come when it was necessary that there should be some method of focusing and utilizing the public impetus given the child welfare movement during the war. It therefore was decided that the name of the organization should be changed to "The American Child Hygiene Association." This question was voted upon by the organization and the change approved.

It would seem that this is a reasonable time for us to look back and make a quick survey of the part this Association has played in the rapidly extending movement for the health and welfare of children. It is not too much to claim that we, as an organization, were the pioneers in this country in this particular field. Ten years ago organized child welfare work in the United States was practically unknown, At that time only one bureau of child hygiene had been instituted in this country — that in New York City. Today, thirty states have bureaus of child hygiene and practically every city and town of importance has some kind of organized child welfare work. The efforts of this Association to study and promote those types of public and private activities which result in the lowering of the infant death rate have made their imprint on the times. The fundamental principles of this Association recognized the right of the infant to the protection of society. During the past ten years, at our annual meetings, the subject of infant mortal-

* Presented at the opening session.

Digitized by Google

ity in its various phases, with all its related factors, has been studied and discussed and we have seen the death rate of infants show a rapid and steady decline throughout the United States during this period. It is evident, however, that instead of our work having been finished because of the recognition of the importance of prevention of infant mortality, we have only begun to enter upon that larger field which concerns the protection of child health of all ages.

The war, with its horror and destruction of life is over. At the present time we are passing through a period of great unrest, and destruction and destructive tendencies are more apparent than construction or constructive ideas. We are all aware, however, that one of the great lessons of the war was the realization of the importance of the preservation and conservation of human life, particularly at its beginning. In Europe, notably in England, they are celebrating what is practically a renaissance of the child. England even in the midst of the war, found it possible to put into effect a nation-wide plan for maternity and infant welfare which represents the most advanced action that has been taken by any nation. In France, where the birth rate had been decreasing and where for many years the number of deaths had been in excess of the births, the child has assumed an importance as a national asset that has hitherto been unknown. Measures for the protection of mothers and children are of the first and most vital importance in France today.

Dr. René Sand has reported that, in Belgium, before the war there were only sixty babies' clinics and there are now more than seven hundred. He also states that in 1914 only two cities in Belgium had dinners for mothers, and there are now six hundred municipalities which have followed this example.

At the International Conference on Child Welfare, held in Washington in May, 1919, representatives from all the allied nations were present. The reports of child welfare work accomplished or in prospect are convincing evidence that the world is considering the mental and physical health of the child a question of immediate and pressing importance.

In the United States we are awakening to our opportunity. To a very large extent it depends upon us whether or not our vision shall become a reality. Child life, depending as it does upon the factors of heredity and their modification by environment, is a fertile field for

Digitized by Google

constructive effort. During the period from birth to adolescence, the importance of environment is paramount. It is well known that children are sensitive to their surroundings in inverse proportion to their age. A baby will show almost immediate reaction to its environment, whether for good or ill, while young children will react in only slightly less degree. We may not be able to wholly alter or control the law of heredity but environment is a matter for which we as individuals, and representing society as a whole, are responsible, therefore, in outlining or administering any program for the preservation of child life and health, it is necessary to enlist all the forces of the community. It is not enough that public health departments should be willing to use their organized powers for this purpose. It is not enough that physicians and nurses and social workers should be interested and cooperative in their individual fields. These two groups are essential for protective action but without the force and help of an intelligent public opinion, their efforts will be of no avail. The great and unique worth of an Association of this kind is that it has, from the beginning, included among its members representatives of all the classes I have just mentioned. It has in a very real sense been a forum where the public official, the physician, the nurse, the social worker and the interested layman could meet in common and open conference. It is well for us to remember, however, that the intelligent interest and cooperation of the mothers of the country must be secured, and in our plans for extension, inclusion of parents' associations or mothers' clubs as auxiliary groups or active participants in our program is a factor, the importance of which must not be overlooked.

It seems to me that in such a time as this the protection of child life assumes greater importance than it has ever had before, not only because of our present knowledge of the widespread and useless destruction of health and life that is going on among the child population of this nation, but because the age group which concerns us is one which must have its work and its thinking done for it to a very great extent. We can always count upon cooperation of the children who have reached the thinking age, but, in a larger part, the work which means life and health to them must be carried out by adults.

In the face of this great need, it has been impossible for this Association to stand still. The time has come when it must either go forward with rapid strides and meet the great opportunity and need that con-

Digitized by Google

fronts it, or it will cease to be a force of any particular importance in helping to solve the great problem of our future generation.

The death rate of infants and young children has shown considerable reduction in the last ten years, but we cannot regard the present statistics of maternal mortality with any degree of complacency. In a list of the sixteen largest nations in the world, the United States stands fourteenth in respect to the mortality of mothers from accidents and diseases at the time of childbirth. This, in itself, would seem to be all the impetus needed for a nation-wide campaign to wipe out this hideous injustice to the mothers of our race. Federal statistics show that childbirth causes more deaths among women of childbearing age (fifteen to forty-five years) than any disease except tuberculosis. This maternal mortality is almost wholly preventable. The reason it is not being prevented at the present time is not because public health officials and public spirited professional men and women do not know the method but because the impetus which must be given by public opinion is lacking.

Our record in regard to infant mortality is slightly better. The last report of the Federal Children's Bureau states that the United States ranks eighth among the great nations in its infant death rate, but I think we may not be considered unduly chauvinistic in claiming that the apparent shortcomings of this standing of eighth are not warranted by the actual state of affairs. The seven countries which have a better record with regard to infant mortality than this country are New Zealand with a rate of 48 per 1,000, Australia with 56, Norway with 68, Sweden with 70, Switzerland with 78, The Netherlands with 85 and Ireland with 88. The United States comes next with a rate of 94.

Infant mortality statistics are not exempt from the curious fallacies which seem to surround in many instances all other branches of "vital statistics." In making statistical comparisons, it would seem only fair that the factors underlying these statistics should be of equal value on both sides. In fact this is a recognized priciple in compiling vital statistics, and the type of population, age grouping, sex distribution and many other factors are considered before final conclusions are drawn. It would seem then, that we might with a certain degree of justice, cease comparing a country like New Zealand, with its one and a half million population, with a country like the United States,

Digitized by Google

with its hundred million. Many of our western cities, notably Seattle, San Francisco, Los Angeles, Salt Lake City, Portland (Oregon) and even our middle western cities like Minneapolis, show an infant death rate which compares very favorably with that of New Zealand. Our great cities, such as New York, Chicago, Philadelphia, Detroit, Boston and Cleveland, cannot fairly be called upon to justify any comparison of their vital statistics with those of countries which do not have to meet the sanitary problems of congestion of population, overcrowding, the economic questions of close industrial competition which are such marked factors of city life, and the racial questions which arise from dealing with all nations of the world, settled in an unaccustomed environment. This country's infant death rate of 94 is lower than that of Denmark with 95, England and Wales with 96, Scotland 107, France 112, Belgium 120, Italy 130, Japan 155, Germany 165, Roumania 180, Austria 185, Russia 245, Hungary 260.

We cannot, however, satisfy our consciences as easily as this. The death rate of 94 among babies of the United States is still entirely too high. Through application of the knowledge we now possess, the infant death rate in the United States can be reduced 50 per cent.

During the year 1916, 164,660 babies under one year of age died in the United States. During the same period, approximately three hundred thousand children under five years of age died in this country. Of the babies dying during their first year, 40 per cent died in the first month of life, 55 per cent of them within the first six weeks. It is evident that the further reduction of infant mortality will come only with the wide and universal extension of proper prenatal and maternal care. It has been shown by studies made in Boston, New York and many other places, and carried on over a series of years, that proper prenatal care will reduce infant mortality during the first month of life from 50 to 65 per cent.

Recently we have been hearing a great deal about the importance of the child of preschool age. The Children's Year, which originated with the Federal Children's Bureau and the Woman's Committee of the Council of National Defense, gave tremendous impetus toward securing care for the child of preschool age. Three hundred thousand deaths a year in children under five years of age in the United States is little short of a disgrace. The last census figures show that one death out of every four that occur at all ages in this country is in a child under five years of age, special surveys indicate that 80 per

Digitized by Google

cent of all mortality from contagious diseases occurs under five years of age, and the records of physical examinations in this age group show that physical defects are far more prevalent among children of preschool age than they are among children of school age.

The school age of the child also demands attention. Systems of school health supervision throughout the United States are inadequate and, to a very large extent incompetent. I know of no other line of child hygiene work where we have been so complacently accepting statistics of work accomplished and where, in the great majority of instances, the statistics were simply cumulative evidence of the existence of a greater need, without any relation to protection of the health of the child. There can be no doubt that the entire system of health supervision of children of school age needs a more thorough standardization and more adequate administration that it has had yet, before we can assume that the health rights of children of this age are safeguarded.

The United States Public Health Service is putting into effect a program which will, if adopted, place the health supervision of school children on the same plane of efficiency that has been so remarkable a feature of the efforts to reduce infant mortality.

Finally, we come to protection of the child in industry. Much remains to be done. The question of child labor is still unsettled, and whether children are in industry or not, the health of the child during the period of adolescence is an important factor in the future life of the race.

These are the great problems which this nation will be called upon to solve during the next ten years, if it is to maintain the pace the rest of the world has set. The work that remains to be done in this country is primarily the work of organization. Health boards must be stimulated to action. Physicians and nurses must be made to see that their co-operation is essential. Laymen must understand that only with their intelligent interest may we give the children of this country as good care as the children of most of the countries of Europe are receiving.

At the present time in the United States there is no national body other than the American Child Hygiene Association which devotes itself entirely to problems connected with child life. There are individual and highly specialized societies dealing with various parts of child life or various factors or incidents related to it, but the American

Digitized by Google

Child Hygiene Association stands alone in its acknowledgment that the child must be considered as an individual human being, that no part of its life history can be wholly dissociated from any other part. As Sir George Newman has said: "Nor is the individual, taken at any one moment, the whole of the issue. His life history, his heredity, his family, his domestic life, his personal habits and customs, his rest and his occupation, his home as well as his workshop, have also to be considered. In short, preventive medicine to be effective must deal with the man, the whole man as an individual as well as a member of the community." Concretely, as I see it, the success of this organization must lie in its ability to so focus the attention of the people in every community of the United States upon this problem of child health that there will arise a stupendous demand for the creation of those governmental activities which alone can assure the good health of the community, particularly of the children.

This Association should have some form of organization in each State. This organization may have subdivisions in each county or local political unit. The membership should be drawn from all classes, from professional life and from the various groups of the laity. The Association should have not less than 50,000 active members. It must and can become a real force in the community. It must have behind it a great vision of a world made safe for children and the practical wisdom to make this vision come true. The program for the expansion of the work of the Association has been prepared and approved by the Executive Committee and the Directors. It provides for the employment of a general secretary and such aids as may be necessary. This will probably include field secretaries and possibly a publicity secretary. Efforts are to be made to forward the child hygiene movement throughout the country. A budget of $50,000 is needed for the first year's work. Twenty thousand of this amount has been promised by the American Red Cross, an additional $10,000 represents our previous annual expenditure which probably can be raised in the way in which our budget has always been raised. We have received two additional subscriptions of $1,000 each, leaving an amount of $18,000 to be raised. With the added interest in child welfare which is so evident at the present time, the raising of this amount should not be a difficult task.

If this Association is to justify its existence it must be satisfied with nothing less than the final accomplishment of a program for the prevention of infant and child morbidity which will assure

Digitized by Google

First: That each child shall have a heredity of physical and mental health and that every mother shall receive the necessary instruction and care during her pregnant period and time of confinement so that her own health will be protected and her child be healthy;

Second: That there shall be no deaths of babies from preventable causes and that the economic and social factors in every community which have made possible the present high death rate shall be corrected;

Third: That no mother shall go without the necessary care and instruction which will enable her to keep her baby well;

Fourth: That every child of preschool age shall have an opportunity for adequate health supervision; with physical examination at least once each year and the necessary supervision to see that good health is not only obtained but retained;

Fifth: That the system of health supervision of school children shall be complete and adequate so that every child shall come under regular and competent medical supervision, in order that the spread of contagious diseases may be eliminated and the occurrence of physical defects prevented or detected at the earliest possible moment;

Sixth. That every school building shall be maintained in so hygienic and sanitary a manner that the child may have a safe and healthy place in which to spend those hours in which it must be in school and that such adequate ventilation be insisted upon that every child may have access to the full measure of clean, fresh air;

Seventh: That every child shall have such health supervision in its home as to prevent the occurrence of physical defects or to assure their treatment at the earliest possible opportunity;

Eighth: That no child under fourteen years of age shall be allowed to work for gain and that no child under sixteen years of age shall be employed for gain unless he is in sound health and physically fitted to perform the work he intends to do;

Ninth: That all children in industry, if work they must, shall work under the best conditions of hygiene and sanitation, with competent health supervision, and, finally,

Tenth: That there shall be in each State the necessary legislation to secure for the child the right to happiness and mental physical well-being.

This has been called the "century of the child" and Miss Lathrop has made a plea that, as a result of the Children's Year, we should have a "Children's Era." The opportunity for great public service is before us. The achievement of universal child hygiene is not a difficult or dicouraging task. In nearly all its essentials the methods of work have been outlined and the road to final accomplishment is clear and with but few obstacles. Work for children carries with it its own inspiration and in no other field of human endeavor can we be more sure of the value of our efforts.

Digitized by Google

THE IMPERATIVE NEED OF SAFEGUARDING MATERNITY AND INFANCY*

JULIA C. LATHROP, Chief of the Children's Bureau, Washington.

We have heard at first hand from the previous speakers something of the underlying activities which enabled our country to meet the stern test of national efficiency imposed by the war,— some of the reasons why it was possible to achieve the brilliant organization of men and material which brought the great war to its close.

The war has prostrated all Europe, adding to battle loss incalculable civilian suffering and deprivation and the task of rebuilding life will be slow and hard, requiring further sacrifice. The most urgent human need is to keep children alive,— to make good so far as may be the stunting of growth, the retardation in schooling, the subtle injury of years of terror, which millions of children have endured, as one item of the cost of this war in Europe.

But our nation turns back to the duties of normal life to find itself possessed of a civilian population unscathed by invasion — no mother has been obliged to starve herself to keep her child alive, no soldier's orphan has died of privation. We are unable to imagine the condition of our land if like little Serbia one-half of its physicians had been swept away by an epidemic of typhus. These facts give no excuse for complacency. On the contrary they force us to examine painstakingly what our children may need, and we are present now, I take it, to consider how democracy is working in our country, tested, as it must always be, in the last analysis, by the most fundamental conditions of living.

Our question has vast implications, but we may limit ourselves to an area where we shall ask, Does any mother die needlessly in giving birth to her child? Does any child die needlessly? Does every child born have a fair chance for sheer existence first and then for growth in an atmosphere of physical and moral decency and mental vigor,— all of which are indispensable if liberty is to be full-fledged? Less

---

* Presented at the joint General Session with the Southern Medical Association, Tuesday night, November 12, 1919. Other speakers at this session were Maj.-Gen. Merritt W. Ireland, Surg.-Gen. U. S. A.; Rear Admiral W. C. Braisted, U. S. N.; Senior Surg. C. H. Lavinder, U. S. P. H. Service, Washington, D. C.

Digitized by Google

than this for our nation's children cannot satisfy the richest and most generous of democracies. Nor does aught short of a universal conception satisfy the prophecy of those who founded our government on a basic theory that social democracy could be slowly but surely realized under it.

Has not the hour come for a decisive advance in the expression of public responsibility for child welfare?

This audience well knows the long yearly roll of needless civilian deaths in the operations of industry which in war time and in peace time leave widows and children to an unequal struggle. These preventable deaths are one of the vast implications to which I referred a moment ago, and you are among those who are working to lessen these losses and to make the public realize its power and duty to aid in lessening them. There are other losses which you keenly realize but which to the general public are still in the dark limbo of fatalism. I mean of course the needless deaths of mothers and babies and the reduction of vigor and well being in survivors of which the deaths are the indisputable sign.

I shall limit myself to one phase of the prevention of infant mortality, in which the mother and child are considered together. I regret that there is not opportunity for a full discussion since much thought as to many practical details is needed. The statement which follows is drawn from the Seventh Annual Report of the Children's Bureau:

"The Children's Bureau series of reports on infant and maternal mortality in urban and rural areas has for the last seven years steadily accumulated evidence of a high degree of annual wastage of life and vigor.

"The studies show that poverty and ignorance are yokefellows and that civic responsibility for decent conditions of living is only beginning to reach an expression which can help to ease the burden.

"More than 16,000 mothers die yearly from causes incident to child bearing, and ill-health is suffered by a vast number of others from the same cause. These deaths and disabilities are now known to be needless in large measure, and among women who can command adequate care their proportions are already greatly reduced. Over 200,000 babies less than a year old die annually. These infants' deaths are controllable almost without exception. Poverty is a constant condition of the highest infant mortality rates, and the rates steadily improve

Digitized by Google

as income increases to a good living standard. In the interest of humanity and of sound national economy adequate care for maternity and infancy should be universally available. The lessening rates of infant mortality in the United States for the last few years are encouraging. They indicate the effect of many scattered public and volunteer activities for infant welfare, but the reduction is far too slow. New Zealand still shows a much lower rate than our best States, and the United States is still seventh from the head of the list of countries judged by the favorable character of their infant mortality rates. The best available world figures for maternal mortality show that the United States is fourteenth down the list, that is, the life of the mother is safer in thirteen other countries than in the United States. The neglect of maternity is shown by the fact that in a thirteen-year period during which deaths from communicable diseases have been reduced — typhoid fever deaths cut in half, croup and diphtheria reduced two-thirds — the deaths of mothers from causes incident to childbirth show no diminution, although these causes are also known to be in great measure controllable.

"Based upon American studies and upon the experience of various other countries, a measure was proposed in the last annual report of the Children's Bureau which it is believed offers a practicable plan for reducing the present losses of life and vigor. The essential feature of the proposed plan is that the United States government shall cooperate with the States in providing a joint fund in each State to be used so as to afford effective means for the protection of maternity and infancy. Mothers and babies are the same in the rural community and the city areas. They need the same care. The rates of death are approximately the same. The proposition therefore is of general application.

"The principal features of such care are:

1. Public-health nurses.
2. Accessible hospital care and medical attention.
3. Teaching and practical demonstrations for mothers of the hygiene of maternity and infancy and of the household arts essential to the well-being of mother and child.
4. Accessible consultation centers or well-children's clinics for the periodical examination of young children in order to secure their most vigorous development.

Digitized by Google

"It will be seen that such a program involves various agencies in addition to medical and nursing care. It requires the cooperation of public and volunteer activities, some already exist and are at work ready for coordinated effort. For example, the State university extension divisions and departments of home economics are already doing excellent pioneer work and can greatly assist the plan. The public libraries, especially those in smaller towns and the traveling libraries, are already undertaking an educational function in the careful distribution of pamphlets and literature for mothers.

"Such a partnership between the Government and the States already serves agriculture through the Smith-Lever Law, already serves vocational training through the Smith-Hughes Law, and is creating through the joint work of the Government and the States a new and cleansing knowledge of social hygiene, and is slowly removing the isolation of the remote ranch and farm family by the good-roads act. On exactly the same plan of Federal aid stimulating and standardizing State and local activities, the well-being of mother and child, a basic national economy, may be secured.

"In this connection, Australian parliamentary reports of 1917 are of interest. For the last seven years the Australian Commonwealth has allowed for each living birth the sum of $25, and the acceptance of this allowance is general. Yet the report on infant mortality submitted to the Australian Parliament in June, 1917, by the committee concerning the causes of death and invalidity in the Commonwealth strongly urges the adoption of a general scheme of practical measures, such as are in force in New Zealand and elsewhere, as a means of lessening the infant mortality rate. In August, 1917, the same committee submitted a report on maternal mortality in childbirth. Figures are given to show that, although there was a decrease in the death rate after the introduction of the maternity bonuses, this decrease was not so great as it had been during the preceding years. The report concluded with the following paragraph:

> Speaking generally, your committee is of the opinion that much greater benefit could be obtained from the large sum of money spent annually than is being obtained under the present system, and that as the wastage of life and the damage to health now occurring in connection with child-bearing is due to the ignorance of the mother and lack of skilled care, such improvement should be sought in two directions:
>
> (1) The provision of every facility for pregnant women to obtain skilled advice before the confinement occurs.
>
> (2) The provision of trained attention by a properly qualified and properly supervised midwife or nurse during the lying-in period.

Digitized by Google

"The experience of England seems to show that a general measure of such character as that outlined above is absolutely essential in a country of modern standards of health and comfort even when health insurance with maternity benefits is in operation.

"The health-insurance law of the United Kingdom went into operation in 1911. It provides a benefit of $7.50 upon the birth of a child for the wife of an insured man and double that sum if the wife herself is insured and the wife of an insured man.

"Yet since this law went into effect two measures have been passed by Parliament permitting grants-in-aid to sanitary districts for the protection of maternity and infancy. The second was passed in August, 1918, and sanctions increased expenditures. It specifies the objects for which funds may be spent and is clearly an expression of a belief that no provision already in existence is adequate. It goes so far as to provide for home helpers to ensure a proper rest period for mothers after the birth of a child.

"As applied to the United States, it may be said with certainty that any public provision for safeguarding maternity and infancy must be universal. It must afford a dignified service which can be utilized with the same self-respect with which the mother sends an older child to the public school. It must not be compulsory."

This Society has a distinguished record of devoted work, of upholding the finest scientific standards. It is perhaps suitable to ask if the time has not come when without lowering in the least degree its standards, it may wisely go forward with a more popular appeal. The country is, I believe, ready as never before to recognize the imperative economy of conserving life at the beginning and to accept the public responsibility that follows that recognition, but this is not a process to be accomplished by any one agency nor completed by any one campaign. It is a work that will never be finished; for the development of the protection of maternity and infancy will follow the discoveries of science. The protection of infancy in the modern sense requires coordinated activity in many fields. To secure a fair start for every baby means the fine art of cooperation and steadfast holding to the simple but stern principle of universality. It needs much volunteer interest, guided and informed by scientific authorities.

Digitized by Google

Digitized by Google

PRENATAL AND MATERNAL CARE

COMMITTEE

Chairman, Dr. James Lincoln Huntington, Boston
Vice-Chairman, Dr. Alice Weld Tallant, Philadelphia
Dr. Arthur B. Emmons, 2nd, Boston
Dr. Ralph W. Lobenstine, New York City
Dr. Robert L. DeNormandie, Boston
Dr. Jacob Newman, New Orleans
Dr. Mary Sherwood, Baltimore

Dr. Tallant, Presiding

Digitized by Google

Digitized by Google

INTRODUCTION BY THE CHAIRMAN

JAMES LINCOLN HUNTINGTON, M. D., Boston

Read by Dr. Tallant

It is with infinite satisfaction that I welcome all of you to this conference on Prenatal Care, that you may listen to the accomplishments and criticise the results, so that we may plan for an ever brighter and better future in this all-important work. This satisfaction is only dampened by my enforced absence.

Before taking up what promises to be a most interesting and valuable program of the work accomplished, and the problems to be met, I want you for a moment to consider, not so much the work, as the worker, as I introduce possibly a new and sometimes neglected element in Prenatal Care.

In a wonderful address to the medical under-graduates of his old University in Toronto, Sir William Osler gave this soul-stirring admonition. "More than any other, the practitioner of Medicine may illustrate the second great lesson (of Plato) 'that we are here not to get all we can out of life for ourselves, but to try to make the lives of others happier.' This is the essence of that oft-repeated admonition of Christ, 'He that findeth his life shall lose it, and he that loseth his life for my sake shall find it,' on which hard saying if the children of this generation would only lay hold, there would be less misery and discontent in the world. It is not possible for anyone to have better opportunities to live this lesson than you will enjoy. The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head. Often the best part of your work will have nothing to do with potions and powders, but with the exercise of an influence of the strong upon the weak." * * *

If this advice applies to the practice of medicine, how much more must it apply to us who work in the special field of Pre-natal Care. To the nurses, social workers, and obstetricians, this should be the refrain of our chanty, the inspiration of our lives. The woman facing pregnancy is in a very real sense a traveler into a far country, an

Digitized by Google

explorer in an uncharted sea. She appeals to us for guidance. Let us be ready and prepared to welcome this great opportunity by fearlessly giving of our strength and of our courage.

This requires first of all, patience. The questions which seem so trivial to us, so absurd perhaps, are very real and very great to the questioner. These we must answer not only with patience, but with strength, with assurance that will carry with it conviction. We must invite the deepest confidence of our patients at all times and seasons, be it in the obstetrical clinic, or in private practice, and we must be available and ready to give of our advice and to stretch out the helping hand at any and all times.

I have spoken of the strength that we must be ready to hold out. We can not assume the responsibility of taking up the patient's burden without the strength that comes only with knowledge and training. We must be able to inspire confidence in those who seek our help. But this we can not do until we have mastered our art. Then, even in the most complicated cases, we can fearlessly take the patient into our confidence, and carry her through with hope and courage.

The days of Prenatal Care are in a very real sense, days of preparation for labor. If we have won the patient's confidence during these days of preparation, we can conduct the labor in such a way as to prove to the patient, and to make her truly feel, that everything is being done to ease her suffering and to help her to bear the necessary pain with courage and endurance. We will then be able to make her readily understand why the time for anæsthesia may have to be postponed, yes, even when necessary entirely omitted. All this we can do, if only the patient realizes that we are working absolutely for her best interests with the strength that comes from knowledge.

Digitized by Google

THE MATERNITY CENTER IDEA ADAPTED TO THE NEED OF NEW YORK CITY

RALPH W. LOBENSTINE, M.D., New York City

It is not my purpose to present to you an array of figures in order to convince you of the value and distressing need of prenatal care for our expectant mothers; or of the call for more adequate supervision at the time of labor and during the first month of the life of the infant.

You are, I am sure, already — one and all of you — familiar with the needless sacrifice of life and of health in Nature's great effort at self-propagation. You are well aware that the nine months of intrauterine life, together with the first month after birth, represent the most critical period in the life history of the individual; and that of the potential lives that do not survive to the end of the first year, approximately two-thirds are lost during the uterogestation or the first month thereafter.

Accepting then these premises as real and vital, how can we most profitably approach this most urgent question in order that we may bring life and health where there would otherwise be either death or invalidism.

One of the striking impressions gained from the conference of the Federal Children's Bureau in Washington last May was the splendid progress made in England during the last two years in legislation in favor of the mother and child. There, in England, and in certain sections of the continent, they are realizing that the State has definite health obligations to its citizens. Who has a better right to demand protection than the expectant mother? In contrast to the advance in England we contemplate our own backwardness and shudder.

In the words of Mrs. Eleanor Barton, "The thing we must consider is whether we can get better service by a communal service or by leaving it to the individual."

The individual system of approach has largely broken down and we must now endeavor to put in its place municipal and national service. We should give our legislators no rest until we obtain in this country, as they have in Europe, suitable maternity protection.

In New York City, and it is about the work in our city that we have been asked to speak, we are approaching the problem of maternity

Digitized by Google

care on a broad scale. The territory is large, the population highly diversified as to nationality and the numbers involved are great.

The population of the five boroughs is close to 6,500,000; the births average about 140,000 per annum, while in the borough of Manhattan, where so far, the bulk of the work of this organization has been carried on, these total from 60,000 to 65,000 per annum.

The fundamental principles we are following are these:

1 — Education regarding need and value of this work.
2 — Co-ordination and standardization of all agencies already in the field that are engaged in some form of maternal protection.
3 — Filling the gaps when necessary and the gaps are, I assure you, many and difficult.

This work is being developed by our Maternity Center Association. As the name implies, this is an association developed primarily for the purpose of securing for our city *real co-operation and genuine co-ordination* of all organizations that engage in maternal and infant welfare work. Our aim has been from the outset to come in contact with all the expectant mothers that we could reach, and to bring about closer community interest between the hospitals, the Department of Health, and private welfare organizations. Our Association has never displaced any other group engaged in this line of work, but on the contrary, welcomes all who will co-operate and who will follow the standards adopted by it. I dwell at some length on this point, for we, as an Association, do not wish to be misunderstood.

Our whole purpose in existing is to advance the standards of medical, nursing and social care during the period of uterogestation and the first weeks thereafter. It matters little *who* does this work, but we *want it done* and we feel that our standards are correct. We hope that the financial burden may be lessened at an early date so that our efforts may bear fruit more quickly.

So far we are still in a developmental stage, despite our rapid growth. The plan of the Maternity Center corresponds somewhat to that one finds in certain sections of England. Were I to compare the English plan with our own, I should say that in the former, the more purely social aspects have been developed further than in our own, while up to the present time we have placed greater stress on the medical and nursing care and upon standardization. Social problems are many and difficult and these we are of course not neglecting.

Digitized by Google

Heretofore it has been almost impossible to accumulate a sufficiently large number of cases, of what we call finished cases, to make conclusions really of permanent value.

In the work of co-ordination and standardization two features of primary importance are especially worthy of note. The first of these is the DEMAND for a closer linking up of all prenatal supervision with the actual birth, whether this takes place in the home or in the hospital.

Merely to look after an expectant mother during pregnancy and then to allow her to shift for herself at the time of labor is unwise, uneconomic and shows poor medical understanding.

The second feature is the avoidance of any slip-up between the end of the obstetric period and the later follow-up, of both patients.

In New York City with its ever shifting population, with its many hospitals and numerous lay organizations, watchful oversight and co-ordinate planning for the patient form our most difficult task.

In the city at large, the bulk of the mothers must be confined at home. This is due to several causes, such as a deplorably insufficient number of maternity beds, popular distrust of hospitals and the family upheaval when the mother leaves the home.

From a purely medical standpoint, however, the ideal would be to deliver all cases in hospital wards.

During the past year, at least two men of high professional standing in the country have gone so far as to depricate any other line of care, yet when one comes face to face with actual conditions in large cities, the error in this viewpoint becomes apparent. In New York City with its 140,000 births, scarcely more than 1,000 women can at any time be accommodated in the so-called free beds of our different maternity hospitals. We of the medical profession must learn to adjust our academic views to actual existing social conditions. The outdoor services of maternity hospitals have been condemned as unfit for proper medical teaching in obstetrics and unsatisfactory for patients. I grant you that all such extern services have numerous faults, and yet I strongly believe that what we need is, more of such services, rather than less. Efficiency will come with education and with the development of higher medical standardization in our schools.

Digitized by Google

Inasmuch, therefore, as our available free maternity beds are so limited, the aim of this Association is to weed out its own cases so far as possible, sending abnormal cases to the hospital and keeping the normal at home.

All patients not cared for by either the indoor or outdoor departments of hospitals, naturally, are attended by either midwives or private physicians. The Department of Health has greatly improved the supervision of the midwives, and we do not feel that we, as an Association, have any right to interfere with their practice. If our nurses discover questionable conduct on the part of a midwife, it is our duty to report such findings to the proper officers of the Bureau of Child Hygiene; but we are not censors and do not ourselves reprimand.

The midwives at present in this city are necessary. Their number is being rapidly reduced, however, through the enforcement of advanced regulations. There will come a time here and elsewhere when steps will have to be taken to give poor expectant mothers other assistance. This can only be brought about by improvement in the education of the physician in obstetrics, and in giving groups of trained nurses a special course in obstetrics and a special license in midwifery.

The poor parturient has to be looked after and if we gradually abolish the midwife, we must institute better care, and this means better doctors and specially licensed trained nurses.

In closing my remarks I desire to say that I have merely attempted to present a surface sketch of some of the features of our work, while the description of the actual working plan in the office and the tenements, I will leave to Miss Stevens, Chief Nurse, who, I feel sure, will very clearly point out to you the many difficulties we face and our diversified methods of approach.

May we never forget in our comfort the cruel suffering and the complexity of life brought to every poor household where the daily routine is interrupted by childbirth or illness or death. Shall we not, again, I ask you, so mould public opinion that we in this country may too, very soon bring into being a satisfactory maternity protection statute and thus gradually remedy a great evil?

Digitized by Google

THE WORK OF THE MATERNITY CENTER ASSOCIATION

ANNE A. STEVENS, R. N., New York City

You will probably remember that at the suggestion of a committee of obstetricians, Manhattan was divided into ten zones, and it was planned to establish maternity centers and substations in each of these ten zones; each center to be the focus of an educational campaign for maternity care for that zone, to conduct doctor's clinics where medical supervision will be given all patients who have not engaged their own physician or registered at a hospital until such time as they can be persuaded to do so; the nurse in charge of each center together with nurses in coöperating clinics to reach practically every pregnant mother in the zone, to teach her the need for medical and nursing care throughout pregnancy, teach her what and how to prepare for her baby, help her arrange for her care at time of confinement and keep in close touch with her until she really knows how to care for her baby. It was planned that each center consist of an examining room where a doctor's clinic could be held once a week or oftener, a dressing room for patients in order to assure them privacy and a waiting room, made as nearly like a comfortable sitting room as possible, where there could be a continuous exhibit of a model baby's bed, layette, toilet tray, etc., and a bed properly made for the mother's delivery. This work was to be financed and directed by this voluntary organization of citizens called the Maternity Center Association, only until such time as a demonstration could be made so convincing as to assure an adequate appropriation of public moneys to carry it on. (*See Exhibit* 1, *page* 53.)

When the association was formed, the New York Milk Committee took the entire responsibility for the work in two of the zones. The Women's City Club continued to finance the work in the zone where they established the first Center, but put the actual nursing under the direction of the Maternity Center Association.

When a nurse begins work in a new district she first learns every facility for maternity care which that district affords. She then visits every organization whose workers might come in contact with pregnant mothers of that district. By every organization I mean, of course, settle-

Development of New District

Digitized by Google

ment houses, church clubs, district offices of relief organizations, schools, dispensaries or clinics, and all nurses, such as school nurses, baby health station nurses, visiting nurses, etc.

To these workers she explains the need for supervision throughout pregnancy and asks that they report all pregnant mothers with whom they come in contact to the Maternity Center, either as already under their care or as in need of care.

With patients referred in this way as a nucleus the nurse begins work in the district and while visiting these patients she canvasses the district in her effort to learn of every pregnant mother early in her pregnancy. She asks her patients and the janitresses of tenement houses about other patients; in short, she leaves no stone unturned in her effort to learn of every pregnant mother.

On the first visit she makes to these patients they automatically divide themselves into four classes:

Types of Patients

1. Those who have made no arrangements for care at the time of delivery.
2. Those who have engaged a private physician for care at the time of delivery.
3. Those who have engaged a private midwife for care at the time of delivery.
4. Those who have registered with a hospital for care at the time of delivery.

Group No. 1

The first group of patients, those who have made no arrangements for care at the time of delivery is, of course, the nurse's greatest responsibility. She aims to secure for that patient a complete physical examination by a physician and to learn all she can of the environment in which the patient lives, so as to be able to advise the patient as to the best arrangements for her to make for her care at time of delivery.

Method

The method the nurse uses to accomplish this aim differs with practically every patient. It is based on the fundamental of getting the confidence of the patient, in order to teach her the need for supervision throughout pregnancy. She may find it necessary to make many friendly visits before even mentioning a doctor's examination or any real nursing care. She may find inviting the patient to see the demonstration at the Center, or to

Digitized by Google

come in and get help in making baby clothes, the best way to gain the confidence of the patient. She may find that she can at once begin with a nursing visit or have the patient come in for the next doctor's clinic.

Response

On this first visit the nurse makes, she meets with all kinds of receptions, from the patient who says, "I don't want a nurse; I always had a midwife; never had no trouble," to the patient who considers the nurse's visit a real godsend and is anxious to do everything the nurse asks her to do. These are the extremes. I might add that this last kind of reception is decidedly less frequent than the first, and that the majority falls somewhere in between.

Standards of Supervision

Although we consider that ideal supervision throughout pregnancy consists of an examination by a doctor as early in pregnancy as possible and frequent return visits to the doctor and nurse, when the patient fails to respond to that extent, we deem the next best thing to be to continue to visit that patient at regular intervals so that she may at least have the nursing supervision. At present, all patients are seen by either a doctor or a nurse once in two weeks up to the seventh month of pregnancy and once a week after the seventh month. On each of these visits the nurse follows as much of a definite nursing routine as the patient will allow. This routine includes analysis of the urine, listening to the foetal heart, asking the patient about or looking for every one of the signs or symptoms which are familiarly called the "danger signals of pregnancy." No patient is dismissed because she fails to follow advice, but the nurse continues to advise the next best thing until she finds the thing which that patient will do. (*See Exhibits* 2, 3 *and* 4, *pages* 55, 57, 59.)

Cooperation with Social Agencies

During all this nursing supervision, the nurse works with every other organization toward the solution of the social problems she may find in the home, for she considers not only the physical condition of the patient, but the peace of mind of the patient, of equal importance and her responsibility. During this time she also teaches the patient as much as she can about the preparation for her baby and its care after birth. (*See Exhibit* 5, *page* 60.)

Digitized by Google

All this nursing care is given by a combination of visits which the nurse makes to the patient's home and visits which the patient makes to the nurse during her office hours at the Center. The basis of decision as to whether the nurse will visit the patient or the patient visit the nurse is first of all the attitude of the patient and then her convenience. The nurse never asks a patient to come to the Center until she feels she has gained the confidence of that patient. She never asks a patient to come to the Center for nursing care, if that visit would work a real hardship on the patient in the form of dragging with her several children under school age or long distance travel, or any real physical discomfort.

Visits To Patient in Her Home

The advantages of this combination of visits are several. First, the nurse learns the patient in her own surroundings, not as an isolated patient, but as a part of her environment, then when the patient comes to the Center she sees the exhibits, meets other patients, gets away from her own little rut and at the same time makes it possible for one nurse to care for more patients in a given time because the patient does the traveling. The patient gets more complete nursing care, for the blood pressure is taken at the Center, as nurses do not carry blood pressure apparatus in their bags.

To Nurse at Center

If any patient fails to come to the Center as she has promised, the nurse visits her for the nursing due that day and tries again to get the patient to come to the Center for the next visit.

If abnormalities develop during pregnancy, the nurse arranges for immediate medical supervision for that patient, either in the hospital or at home. Often when, from the clinic physician's standpoint, the patient can only be adequately cared for in a hospital, and the patient either can't or won't go to the hospital, the nurse persuades that patient to engage a doctor and then either makes daily visits herself or refers the patient to the nursing service of the Henry Street Settlement. Many cases of beginning toxæmia needing rest in bed and special diet have been cared for in this way with perfectly satisfactory results.

Procedure if Abnormalities Develop

The next responsibility of the nurse in the care of these patients

Digitized by Google

is to advise as to their arrangement for care at the time of delivery.

Advice as to Care at Time of Delivery

This advice is based on the physical condition as learned by the doctor's examination, whenever the patient has had one, and the environment in which she lives and the facilities for care. For instance, if we consider the physical condition only, we might urge hospital care as the best for her from an obstetrical standpoint, but if we find by having her leave home, the home might become disrupted, we modify our advice to fit that patient's individual home problems.

If there is no home problem to be considered, it is usual to advise hospital care for primiparæ, also for all patients who develop abnormalities and all patients with a history of difficult labors or previous abnormalities.

Even though there are free hospital beds to care for less than 30 per cent of the pregnant mothers of Manhattan each year, we have as

Hospital Care

yet found little difficulty in securing hospital care for patients who most need that hospital care. This doesn't mean hospital beds for every patient who wants to go to a hospital. We find an increasing desire on the part of the patients for hospital care, and when it is not possible for them to get hospital care we find the patient less dissatisfied when she can have a doctor from a hospital outdoor service take care of her. Frequently she is willing to pay for this care on the same basis as she would pay for hospital care.

If the patient wants to be delivered at home, we urge her to engage her physician early and the nurse makes sure that she understands

Home Care

about the visiting nurse service of the Henry Street Settlement, discussing with her the value of such service, even if she has a practical nurse, its cost and her ability to pay and, when possible, deciding on the exact fee, which decision is passed on to the Henry Street nurse.

It is in the care of patients to be delivered at home, that we probably meet our greatest problem. It is here we have to provide some one

Problem involved

to take the mother's place in the home while the mother stays in bed the necessary time after the baby is born or while she gets some of the necessary rest previous to delivery.

Digitized by Google

Possible Solution Working Housekeepers

In the district which is being financed by the Women's City Club there is available a fund to provide so-called working housekeepers to meet this need. These working housekeepers are paid directly from this fund 30 cents an hour, a luncheon allowance of 25 cents, and carfare, and the patient pays whatever she can into this fund.

For this purpose the nurses have a list of women, usually the wives of skilled workers whose own children are partly grown and who are anxious to do part-time work in an effort to provide something extra for those children, such as music lessons, seasons' gymnasium courses, phonograph records, etc. These women are, of course, good housekeepers and clean workers and it is not infrequent for a woman who failed to keep her house orderly to show much improvement in the management in her home after she watches the work of the working housekeeper.

I cannot emphasize too strongly the tremendous need for these working housekeepers. Careful prenatal supervision is almost wasted if the mother must get up and care for her home immediately after delivery.

If a patient has made up her mind to have a midwife, but has not actually engaged that midwife, we, of course, do not advise her to do so, but try to steer the patient to free or part-pay Outdoor Service of hospitals when indoor care is not practical or necessary for that patient.

Frequent Solution is the Midwife Better Solution, Women Physicians, Nurse at Delivery and Working Housekeeper

Here again we meet the same tremendous need for some one to take care of the home while the mother stays in bed. This, to a large extent, the midwife does. She comes in every day and gives the baby his bath and she does, after a fashion, perform certain household duties. The prejudice of our foreign born mothers in favor of the midwife we can easily overcome when we can teach her the possibility of getting a woman physician or having a nurse come with the doctor at the time of delivery. This latter can be done in one district where the Visiting Nurses Service of the Henry Street Settlement provides a twenty-four hour service of nurses for attendance at deliveries in the home. But we find the decision to have the midwife to be largely an economic one, since she

Digitized by Google

gives, no matter how inferior it be, not only the medical, but nursing and household service.

Follow-up Work

Each patient that the nurse has had under actual care up to the time of delivery and any patients reported by the hospitals when dismissed and any patients who will let us know when they leave the hospital are visited for post-natal follow-up work. This means one visit to learn whether or not the mother can adapt her instructions on the care of the baby to the actual presence of her own baby in her home. If not, the nurse makes the visits necessary to teach her. She then visits the patient or the patient visits the nurse once a week until the baby is one month old.

Baby Health Station

The value of continuous supervision to keep a well baby well is carefully explained to every mother and unless the baby is under the care of a private physician, the mother is urged to register her baby at the Baby Health Station. (*See Exhibit* 6, *page* 61.)

Birth Registration

The value of birth registration is also explained and discussed with the mother, and the nurse makes every possible effort to have a copy of the birth certificate in the hands of the mother before she dismisses the case.

Post Partum Examination

The need for a post partum examination not later than six weeks after the birth of the baby is also explained and urged. The patients who were delivered in hospitals, which provide for post partum examination, are urged to return to the hospital and those patients who would not otherwise have a post partum examination are urged to go to the Maternity Center doctor. When the patient has either had this examination or refuses to have it and the nurse feels she cannot persuade her, the patient is dismissed.

Group Instruction to Mothers

Nurses are just beginning to give some group instructions to the mothers at the Center. This group instruction is planned as follows: One week the nurse demonstrates to the group the handling of the baby, dressing and undressing, bathing, and explains the reason for making each piece of the layette as the model is made and the reason for including each article that is included on the toilet tray and shows them how to make boric solution and swabs. In short, every detail in the daily care of the baby is gone over. The next week this same group of mothers returns to the Center and the mothers demonstrate to the

Digitized by Google

nurse. They actually dress and undress a baby, explain how to make boric solution, how to prepare sterile water and how to give it to the baby. Many of the mothers return several weeks in succession and many a mother returns with her three-weeks'-old baby to make sure that she has not forgotten any of the points the nurse tried to teach her before the baby came. Most mothers who come to these demonstrations are primiparae who are eager to learn all they can about their babies.

To avoid confusion in the minds of mothers, all organizations whose nurses teach the care of babies have adopted a uniform technique and this is followed, in these demonstrations.

Group 2. Work with Private Physicians

To the second group of patients, those whom the nurse on her first visit finds to have engaged a private physician, she gives no treatment or advice, but sends a form letter from the Medical Board to the physician asking permission to nurse that patient and to report to him every nursing visit. If he refuses to have the nurse visit the patient, she dismisses the case. I might say the percentage of physicians who refuse to have our nurses visit their patients is very small. (*See Exhibit* 7, *page* 62.)

With the physician's permission the nurse gives the nursing care to his patients in exactly the same way as described above. She never asks that patient to come to the doctor's clinic at the Center, but she does have her come to the Center for her nursing care.

Group 3. Work with Midwives

If the patient is one of the third group, the ones who have engaged a private midwife, the nurse personally visits that midwife. (Form letters are impractical, as few midwives read English.) The nurse then asks the midwife to bring her patient to the Center, explaining that the midwife is taught to do deliveries, but she is not taught to examine the patient's heart and lungs or to estimate the general condition of the patient and that now all good obstetricians realize that such an examination is very necessary for the health of the mother and the coming baby.

If at this first examination the doctor finds any abnormality he does not tell the patient; he either tells the midwife or the nurse explains to the midwife exactly what the doctor has found and points out that it is contrary to the rules governing midwifery for her to handle the

Digitized by Google

case. She asks the midwife to come with her to the patient and discuss other arrangements for her care at the time of delivery.

If at this first examination the doctor finds no abnormality, the midwife is asked to allow the nurse to visit the patient at regular intervals and have her report to the doctor's clinic in accordance with his advice.

We find midwives very suspicious of the nurses and firmly convinced that the nurses mean to take their patients away from them. Those few midwives who speak English and get a clear idea of what the nurses are doing give no trouble, but those midwives who do not speak English and even through an interpreter do not seem to get a clear idea of what the nurse is doing, agree with the nurse when she is there, but when the nurse leaves, promptly tell the patient to have nothing to do with the nurse.

Group 4. Work with Hospitals

If the patient is one of the fourth group, those who have registered with a hospital, the nurse's further action depends on the individual hospital. We have almost as many different working agreements with hospitals as there are hospitals in Manhattan.

Some hospitals assume the entire nursing and medical supervision of patients as soon as they register them and will register patients early in pregnancy. With patients registered at these hospitals the Maternity Center nurse has no further contact. For those hospitals that have not the physical capacity to conduct clinics in sufficient numbers to make this supervision possible, nor visiting nurses to send to the patients in their homes, the Maternity Center Association gives nursing care to their patients on the same basis as to a private physician's patient. The hospital resident assumes the responsibility for medical supervision of the patient and receives the reports on each nursing visit, and the nurse in turn urges the patient to return to the hospital for her medical supervision in accordance with instructions received when she is registered.

Several hospitals do not wait for the nurse to discover patients registered with them, but report each day those registered at their clinic, and ask that the nurse assume responsibility for the nursing care.

Records

All agencies doing district prenatal nursing have adopted a uniform standard of work and are using the same record form. (*See Exhibit* 8, *page* 62.)

Digitized by Google

For every patient she nurses, the nurse keeps a tabulated record form which she fills in at each visit, and which is passed on when the patient is transferred to another organization. A duplicate of this record is filed in the Central Record Office and kept up to date by daily reports which each nurse sends to that office.

The nurses of some coöperating organizations do not send in daily reports of visits to the Central Record Office, but send the finished record after the case is dismissed, so that the number of uniform records to be studied and analyzed may be as large as possible.

Clearing House

The Central Record Office also serves as a clearing house for all maternity work and prevents any duplication.

Exhibits follow. See page 63 for Discussion.

Digitized by Google

EXHIBIT 1

A PLAN FOR MATERNITY CARE

Maternity Center Association

18 West 34th Street, New York City

SOME FACTS ABOUT THE NEEDLESS LOSS OF LIFE IN CHILD-BIRTH

(Supplied by the Federal Children's Bureau of the U. S. Department of Labor and the New York City Department of Health.)

Maternal Deaths

1. More women of child-bearing age (15–45) die in the United States from causes incident to child-bearing than from any other cause except tuberculosis. For women, maternity is a scourge second only to the White Plague.

Infant Deaths

1. 12,657 babies under 1 year of age died in New York City in 1918. 35% of these died as the result of conditions arising before birth or accidents at birth, mostly *preventable.*
2. 5,818 babies under 1 month of age died in New York City in 1918. 75% of these died as the result of conditions arising before birth or at birth, largely *preventable.*
3. The number of still-births reported in New York City in 1918 was 6,793. Only a small proportion are reported and the total loss of life including miscarriages and interrupted pregnancies is very much larger. Hundreds of these losses are *preventable.*

THE PROPOSED REMEDY

Careful physicians have so developed the methods of caring for their private cases that maternal deaths from causes related to child-birth are rare in their practice. The basic method used has been *early examination* and *supervision throughout the whole period of pregnancy* combined with *aseptic delivery* and adequate *after-care.* These same methods have also markedly reduced the number of infant deaths from causes arising before birth and at birth, the number of still-births and the number of miscarriages.

It is estimated that at least 75,000 pregnant mothers in New York City are entirely without medical or nursing oversight.

The Ideal

That *every pregnant mother* in the City of New York shall be brought under medical and nursing supervision; that *every child* born in the City of New York shall have proper care before birth, at birth and during the days immediately following birth; that the *methods by which the obstetricians have proven they can reduce the maternal and infant death-rates among their private patients shall be applied generally to the population, to those who can afford to pay for medical service and to those who cannot.*

The Method

1. The Maternity Center Association proposes to conduct a *city-wide educational campaign* to teach all men and women the need for, and the value of, maternity care.

Digitized by Google

2. The Maternity Center Association will urge the adoption of a uniform high standard of pre-natal supervision, obstetrical methods and obstetrical nursing practice by the hospitals, clinics, and nurses, as well as by the social agencies and health agencies working on maternity problems throughout the city.
3. The Maternity Center Association will maintain a *clearing-house* for all maternity work in Manhattan.
4. The Maternity Center Association will keep *records* of every maternity patient coming under the care of clinics in the borough and follow up each case so that no woman shall be allowed to go without care by reason of illness, carelessness, or other cause.
5. The Maternity Center Association will promote and extend the work of every agency working in the borough on the problems of maternity and child welfare.
6. The Maternity Center Association will secure, through other agencies, relief and assistance for mothers belonging to families where poverty is clearly a menace to the health of mother and infant.
7. The Maternity Center Association will secure necessary *household assistance* for the mother at the time of her confinement.
8. The Maternity Center Association proposes to establish a *maternity center* in each of 10 zones in Manhattan, as well as a sufficient number of *substations* when not enough pre-natal clinics exist to serve the needs of the zone.

A MATERNITY CENTER

(a) Will be, in each zone or neighborhood, the center of an *educational campaign* for maternity care.
(b) Will conduct doctor's clinics where medical supervision will be given to all patients who have not engaged their own physician or registered at a hospital, until such time as they can be persuaded to do so.
(c) Will, through nurses and social workers attached to the Center and co-operating clinics, *reach practically every pregnant mother* in the zone to teach her the need for medical and nursing care throughout pregnancy, teach her what and how to prepare for her baby, help her arrange for her care at time of confinement, and keep in close touch with her until she really knows how to care for her baby.
(d) Will be, in each zone or neighborhood, the center for promoting the health of mothers and babies by every possible means.

THE PROPHESIED RESULT

If this program is carried on in 10 zones it will:

1. Reduce death of mothers 75%
2. Reduce premature births 25%
3. Reduce death rate of infants under 1 month..... 40%

THE UNUSUAL NEED

As the war has destroyed adult life and its effects have reduced the number of births, it becomes a patriotic duty of first importance to stop this needless waste of infant life and mother life.

Our request for support is based not alone on humanitarian grounds but on practical patriotism.

Digitized by Google

EXHIBIT 2

CLINIC ROUTINE

MATERNITY CENTER ASSOCIATION

18 West 34th Street, New York City.

The nurse is urged to so conduct her clinic as to assure privacy to each patient examined, and the same treatment which the patient would receive if she were the only patient in the office of one of our best obstetricians.

Nurse is to wear her graduate uniform during clinic and during her office hours.

Nurse's Duties

1 — Preparation of Clinic Room

Pads of doctor's record, return visit to doctor, post-partum examination; pencil; examining table; side tables; sterilizers; basins; instruments; supply of clean dry gloves; Department of Health material for taking Wasserman's, cultures and smears; cotton balls; tampons; throat sticks; sheets; pillow cases; sounding towel; adequate supply of clinic drugs; solutions; thermometer, in glass of 50 per cent alcohol; glass of cotton; to be ready one-half hour before the time set for clinic.

2 — Preparation of Dressing Room for Patients

Screens or curtains arranged to form individual dressing rooms; a sufficient numbe of clean clinic gowns; separate chair provided for each patient to leave clothes on, unless room is provided with racks or hooks.

3 — Preparation for Urinalysis

Unless the urinalysis is made so near the toilet that the waste urine may be thrown directly into the toilet, a covered pail is to be provided one-fourth full of 1 per cent lysol solution. All waste urine and washings from the test tubes to be thrown into this pail, and under no circumstances is waste urine to be thrown into any sink or wash basin, even though the basin is not used as a wash basin.

Test tubes, sterno, litmus, acetic acid, funnel, filter paper, test tube holder, vessel for collecting specimen, basin of 1 per cent lysol solution and cotton balls for patient to cleanse vulva before voiding, basin for used cotton balls, provision for patient to wash hands, to be in readiness one-half hour before the time set for clinic.

4 — Preparation of the Patient for Examination

Each patient to completely undress, except her shoes and stockings, and to put on clean gown supplied by the clinic. Her shoes to be unfastened so that the doctor can examine her ankles for oedema, her temperature to be taken and a urinalysis made *before* the patient is seen by the doctor.

5 — Assisting Doctor in Examining Room

Make notes on record pad at the doctor's dictation, reminding him tactfully of any omissions made in his dictation. Conduct examination in the following order: Chest, breast, blood pressure, abdominal, foetel heart, measurements, ankles, vaginal, Wassermans or smears when necessary.

Note: Preparation for vaginal examination. Sponge vulva with 1 per cent lysol solution. Give doctor fresh gloves for each patient.

Digitized by Google

If the doctor wishes to do a vaginal examination on a patient more than eight months' pregnant, or one who is bleeding, take same precaution as though examining a patient in labor; clip; scrub with green soap and water; then 1 per cent lysol; give doctor freshly boiled, sterile gloves.

6 — Arrangement of Examining Room After Clinic

Soiled linen in laundry bags; fresh linen on tables, tables covered; all instruments used to be washed, scrubbed when necessary, boiled five minutes, dried and put away; all gloves used to be washed in cool water and green soap and thoroughly rinsed, wrapped in towel, dropped in boiling water and boiled for five minutes, then to be dried, powdered and put away in a clean towel ready for use at next clinic; solution basins to be emptied, washed and dried; all waste to be securely rolled up in newspaper and put in house garbage can; supply of drugs to be checked up and replenished when necessary.

7 — Records

All "Doctor's Record" cards to be written up and filed; reports mailed to the central office; reports on the condition of patient sent to nursing agencies caring for the patient and other agencies working on the case; field cards to be filed in date file before the nurse goes off duty.

Doctor's Duties. Doctor's Record Cards Calls for

1. One complete physical examination including heart, lungs, breast, blood pressure, abdominal examination, foetel heart, pelvic measurements, vaginal examination and a Wasserman and G. C. smear on all patients with a suspicious history. Notes on this examination to be dictated to the nurse.
2. Blood pressure, abdominal; urinalysis; on return visits and provides space for notes on such other observations as he may wish to make.
3. One past-partum examination on every patient; including a statement on general condition; examination of breasts; vaginal; uterus; perineum; and note on results of any intercurrent disease.
4. Recording advice given to patient.
5. Instructing patients when to return to see the doctor. *Note:* All patients not registered with a hospital or private doctor, to be seen by the clinic doctor once a month up to the seventh month, and once in two weeks, or oftener as the case demands, thereafter.

8 — Duties of Clinic Assistants

At those clinics where a lay woman acts as assistant to the nurse, the following duties (and no others without special permission) may be assigned to the assistant:

1. Greeting patient; and from her pink card get her field card from file and send to nurse.
2. Taking temperature } A record of which is sent in to the nurse on a scratch
3. Urinalysis } pad and copied by her on her clinic record.
4. Helping patient dress and undress.
5. Care of any children who may come with patients.
6. See that patient understands when to return and has her pink card so marked before she leaves.

Digitized by Google

EXHIBIT 3

ROUTINE FOR PRE-NATAL NURSING VISITS

MATERNITY CENTER ASSOCIATION

18 West 34th Street, New York City.

First Visit

Get acquainted with the patient and get her confidence. Learn if she has made any arrangements for her care at the time of delivery. If doctor or midwife has been engaged, communicate with him or her. If the patient is registered with a hospital, report to the center. If patient is under other nursing care, report that to the center. Always ask to see patient's hospital or clinic card, or any card which she may have been given by any nurse or other visitor.

Explain simply the reason for an expectant mother's seeing a doctor and nurse early and regularly. Invite the patient to see the center or station. Ask her in a general way about herself, when her baby is expected, other pregnancies, and deliveries, and illness, other members of her family. Direct your conversation so as to get as much data as possible without asking direct questions. Do not attempt a full nursing visit unless the patient meets you more than half way. All patients after the first visit should be seen once every two weeks up to the seventh month, and once every week, or oftener as the case demands, thereafter. All patients are to be encouraged to come to the center or station for as much of that nursing care as is possible for that individual woman. When a patient is antagonistic or refuses nursing care, do not dismiss the patient. Use discretion about revisiting such patients, but see them as nearly as possible at the regular intervals and give as much nursing care as they will accept.

In the care of all patients it is the nurse's responsibility to make every effort to solve (by working with every existing agency) such home problems as might affect the health of the mother or baby. In Zone 7 a staff of working housekeepers is on call to take the mother's place in the home while the mother stays in bed the necessary time post-partum. This service is paid for by the patient's contributing what she can toward the salary of the working housekeeper, and by a fund which supplements the money received from the patient, so as to pay the housekeeper thirty cents an hour, twenty-five cents for her lunch, and her carfare when necessary.

All patients delivered at home or hospital are kept under observation (by the maternity center nurse, or the social service nurse of the hospital) and necessary instructions given, until the baby is one month old, or registered at a baby health station, and until the mother has had or refused to have a post-partum examination, either at the hospital where delivered, or at the maternity center clinic.

Complete Nursing Visit

Ask the patient about any aches, pains, troubles of any kind, directing your questions to cover all items on record. Select a table, chair, machine top, or end of mantle, to use as a work table, and place on it:

Paper napkin as cover,	Test tube and holder,
Nurse's soap, hand scrub and towel,	Urinometer,
Watch,	Litmus paper,
Pencil and note book,	Acetic acid,
Thermometer,	Sterno,
Bottle for specimen,	Matches.

Digitized by Google

Take temperature, pulse, respiration. Thermometer to be washed with soap and water and dried before returning to case. Look for oedema, varicose veins; do not take the patient's word for these symptoms. Apply bandage for varicose veins, patient to pay 65 cents for the bandage, or bandage to be lent to patient as long as needed, washed and returned. Demonstrate the care of nipples, to be done daily after the fifth month, not before. Use cotton ball (or soft tooth brush previously scalded and kept for this purpose), thoroughly scrub each nipple with warm water and soap (white) and dry with a clean towel. Apply albolene, pulling out the nipple. Do not handle breasts. Listen to the foetel heart. If unable to hear, make note on the record — N. H. If foetel movements are felt by nurse, put an X, and if patient says that she feels the baby move, put XX in the space on the record for recording the foetel heart rate. Get specimen of urine either to take to the station for examination or to examine at once for specific gravity, reaction, and albumen, in accordance with instructions given in Sanders', pp. 274–286. Have the patient cleanse vulva before voiding, and void in a clean vessel. If any abnormality in amount, color, or specific gravity, or trace of albumen, report to the doctor or midwife in charge of the patient, if patient has engaged one; if not, use every effort to get the patient under the care of doctor. Teach patient to measure the amount of urine voided in 24 hours before your next visit. Empty a milk bottle of water into a suitable vessel and mark the top level of water on the vessel. Then ask patient to void in the toilet on getting up in the morning; then for the rest of that day and night and the following morning on getting up to void in the vessel, and to note so as to report to the nurse, how much above or below the quart mark the total amount of urine comes.

On the first visit leave the pink card with the date of the next visit. As soon as possible leave the Maternity Center leaflet — Advice to Mothers — after having gone over it carefully with the patient. Note on the record when the leaflet is left. Leave also the list of baby's supplies and mother's supplies. Leave addressed postal to be used in case of emergency or to announce the arrival of the baby. Tell patient about telephoning or coming to the center or station whenever she would like to see the nurse or ask her a question. Then before going to the next patient fill out field card in accordance with instructions; note in pencil the date on which the next visit is due.

Teeth

On an early visit examine teeth and show how to keep clean. Where possible, urge a visit to the dentist or dental clinic for prophylactic treatment. Explain that it is not wise to have extractions done during pregnancy without consulting a doctor, but that cleaning and temporary fillings may be done with much saving of teeth.

On one visit about the seventh month ask to see the layette and advise about it, going over the list of baby's supplies. Urge the patient to visit the center and see the model layette and get help in the choice of materials and patterns. Note on record if the layette is not complete by the eighth month. Demonstrate the preparation of the bed for the baby, made from a clothes basket, soap box, or in a baby's carriage, similar to the model at the center. If the patient is to be delivered at home, some time after the seventh month, ask to see the mother's supplies, going over the list. The patient should be discouraged from her usual plan to use the oilcloth from the kitchen table as a bed protector, and especially urged to prepare bed pad like the model at the center. Note on the report if mother's supplies are not complete by the eighth month. Advise about the arrangement of the room for the delivery, and demonstrate the preparation of the mother's bed like the model at the center.

Digitized by Google

EXHIBIT 4

ADVICE FOR MOTHERS

MATERNITY CENTER ASSOCIATION

18 West 34th Street, New York City.

Motherhood is natural and normal. If you do as the doctor and nurse ask you to, you have no reason to worry about having your baby.

DIET: Eat the food you are used to. Do not eat what you know gives you indigestion, or too much at any one meal.

Drink 8 glasses of water every day.

Drink all the milk you can.

Do not drink any beer, whiskey, wine or other alcohol. These hurt the kidneys and thus may poison the baby.

Do not eat meat, meat-soup or eggs or drink tea or coffee more than once a day.

SLEEP: At least 8 hours every night with windows open.

EXERCISE: Do your regular house work, but lie down several times a day if only for five minutes. If possible take a walk out of doors. Fresh air is good for your baby. If you cannot get out, keep the windows open while you work indoors. Do not do heavy work; it will hurt your baby.

BATHING: Wash all over every day with warm (not hot) water, but do not get into a tub after the seventh month.

GARTERS: Do not wear round garters or any tight bands. The nurse will show you how to make suspender garters.

CONSTIPATION: If you are constipated, drink a cup of coffee (no cream or sugar) before breakfast, hot milk (not boiled) with breakfast, go to the toilet at the same time every day (after breakfast best). During the day eat coarse bread, stewed fruit, drink no tea, but all the water you can, at least eight glasses, hot or cold. Cook five cents worth of senna leaves with a pound of prunes and eat four to six prunes every day. If you have hemmorhoids (piles) hold a compress to anus for five minutes after bowels move and do not let yourself get constipated. Never take any cathartics unless your doctor, midwife, or nurse tells you to.

IMPORTANT: Do not have any sexual intercourse after the eighth month. If you have severe headache, vomiting, spots before your eyes, if your face, hands or feet swell, let your hospital, doctor or midwife and nurse know at once.

Labor begins with pains in back or abdomen; with bleeding or watery discharge. If you have any labor pains or bleeding before the time you expect your baby, go to bed and send word to your hospital, doctor or midwife and nurse at once.

If you are going to the hospital, have ready after the eighth month one set of baby clothes, to take with you to put on the baby when you bring it home. Do not take anything else with you, the hospital will supply all you need. As soon as labor begins go to the hospital.

If you are to be confined at home, as soon as labor begins, send for the doctor or midwife. If the doctor is one of the hospital doctors, follow the directions of your card from the clinic.

While waiting for the doctor, boil a large quantity of water in a covered vessel and set aside to cool. Prepare your bed as the nurse has shown you, take a warm sponge bath, braid your hair in two braids, get out a set of baby clothes ready for the nurse to dress the baby. Get out supplies needed for yourself.

Telephone the MATERNITY CENTER if you need a nurse.

Digitized by Google

EXHIBIT 5

MATERNITY CENTER ASSOCIATION

18 West 34th Street, New York City.

MOTHER'S SUPPLIES

2 gowns.
1 pair white stockings.
4 sheets.
6 bed pads
Vulva pads or supply of freshly laundered old muslin.
Cotton (absorbent).
2 wash-cloths.
2 towels.
4 oz. lysol.
1 bedpan.

The bed pads are made from 6 thicknesses of newspaper open to full size and covered with freshly laundered old muslin tacked in place. No other protection for bed is necessary. As a precaution, when possible, the entire mattress may be covered with oilcloth put on under the bottom sheet. See model at center. All washable supplies for mother and baby should be freshly laundered and put away in pillow-cases or clean, ironed paper until they are needed.

BABY'S SUPPLIES

The following is a list of the complete outfit of baby clothes and toilet necessities. It may be modified as to material, quantity and quality to suit the individual taste and pocketbook.

12 Diapers 18" x 18".
3 Bands 6" x 27".
3 Shirts, size 2, cotton and wool.
3 Petticoats.
3 Slips.
2 Squares 36" x 36".
Note: The squares are used instead of coat and bonnet until the baby is more than 2 months old. See model at the center.
1 Oilcloth or rubber 12" x 18".
12 large safety pins.
12 small safety pins.
Tray — fitted with:
Glass jar for boric acid solution.
" " " nipple swabs.
" " " oil.
" " " small toothpick swabs.
Dish for soap.
Cake of soap to stick pins in instead of a pin cushion.
Hair receiver for absorbent cotton.
Newspaper cornucopias for waste.
Bottle and nipple for giving baby water.

Covered pail with borax water for soiled diapers.
Jars for tray may be empty cheese, candy or jelly jars.

1 Basket or box for bed 15" x 30".
1 Felt pad or folded blanket for mattress
1 Oilcloth case for mattress.
2 Muslin pillow-cases for mattress.
2 Crib blankets, small size.
2 Towels.
2 Wash-cloths, old pieces of linen.
1 piece Castile soap.
8 oz. boric acid powder.
1 package absorbent cotton.
1 quart oil — sweet or albolene.
1 package toothpicks.

Digitized by Google

EXHIBIT 6

ROUTINE FOR POST-NATAL FOLLOW UP

MATERNITY CENTER ASSOCIATION

18 West 34th Street, New York City.

Hospital Cases

See patient as soon after she is dismissed as possible, to make sure she understands how to care for baby. Urge her to take baby to nearest baby health station (see Blue Card) when baby is three weeks old. Telephone health station to see if she does register. Urge her to bring baby to your own station when one month old. At that time arrange for post-partum examination:—if it is the practice of the hospital, at which the patient was delivered, to instruct patient to return for post-partum examination, urge her to go at time set by hospital; if not, urge her to come to your station for such examination. If she fails to come, visit her to learn condition of baby, and to urge post-partum examination. If during the post-natal follow-up work any abnormality is discovered in baby or mother, report that at once to the resident of the hospital, where patient was delivered, and carry out his orders as to whether patient is to return to him or be referred to gynecological or baby clinic.

Patient Delivered at Home

Urge all pre-natal cases to send you post card when baby is born. When postal is received, visit as soon as possible to see that everything is all right; arrangements made for care of home and children so as to keep mother in bed proper time, etc. If a Henry Street nurse is doing post-partum bedside nursing, make no other visit but urge mother to bring baby to see you at station when the baby is one month old. If a practical nurse or a midwife case visit every day or so, but do not interfere with her conduct of the case. If you find it necessary to report any irregularity to the Department of Health communicate with the midwife before doing so. After she has dismissed the case follow the routine outlined above. Make special effort to get all midwives' cases to come for post-partum examination, and also private physician's cases if they dismiss case before baby is six weeks old.

Records of Post-natal Follow-up Patients

If a patient has been a pre-natal case on whom you have done pre-natal nursing up to the time of delivery, flag record with blue flag, and yellow, if baby is to be seen at home, and put behind date you expect to visit. If patient is due to bring baby to you put blue flag, and white flag on, and file behind date patient is to visit station. If patient is a new case when reported to you for post natal follow up, record her in book as new patient reported in post-partum period, and flag in the same way. If patient is one on whom you did early pre-natal nursing, and transferred when she registered at hospital, or dismissed because patient or doctor refused nursing care, use pink instead of blue flag, and do *not* count as an active case.

Digitized by Google

EXHIBIT 7

MATERNITY CENTER ASSOCIATION

18 West 34th Street, New York City.

MEDICAL BOARD

Dr. Josephine Baker
Dr. J. Clifton Edgar
Dr. Ralph W. Lobenstine
Dr. Herbert B. Wilcox

President, Mrs. John S. Rogers
Treasurer, Mrs. Arthur S. Burden
Assist. Treas., Stephen G. Williams
Exec. Sec'y, Christina C. Miller

Dr.....
.....

New York City.

My Dear Dr. .....:

Mrs. ..... who has engaged you for her care at delivery, has been referred to this association for nursing care.

In order to make the work of the nurses of this association of a uniformly high standard, the Medical Board has adopted the enclosed routine for the nurses to follow.

May we not have your cooperation in our effort to teach the women of the community the need for, and value of, medical supervision throughout their pregnancy?

May we have your permission to instruct our nurses to visit Mrs. ..... in accordance with our routine, and report each visit to you?

A prompt reply on the enclosed slip will be greatly appreciated.

Cordially yours,

RALPH W. LOBENSTINE.

ENCLOSURE — EXHIBIT 7

INSTRUCTIONS FOR NURSES

When any new patient is reported to the Center, the nurse is to make friendly visits in order to win the confidence of the patient. If on the first visit the patient is found to have engaged her own physician, no further visit is to be made without his permission, nor any treatment or advice given.

All patients on the active list, should be seen once in two weeks, up to the seventh month of pregnancy, and once a week or oftener as the nature of the case demands thereafter.

ROUTINE FOR COMPLETE NURSING VISIT

See instructions published in full in Exhibit No. 3, page 57.

EXHIBIT 8

MATERNITY CENTER ASSOCIATION

18 West 34th Street, New York City.

RECORD FORM

This record is kept on file at the Central Record Office and is written up by clerks, from the daily reports which the nurses send in.

A duplicate of this record is kept by the nurse in the field and is filled in at the time of each visit. If the patient is transferred to another organization this record is sent to that organization.

Digitized by Google

ZONE

MATERNITY CENTER RECORD

Name of patient	Para	Name of husband	Address	Floor	Mar.	Sin.	Wid.	Div.	Sep.	Des.	Date of marriage	Maiden name

Physician, hospital or clinic, with whom registered	Address	By whom reported to maternity center

Midwife	Address	Other agencies interested

PERSONAL AND SOCIAL HISTORY

Nationality of mother of patient	Birthplace	Color	Age	Years in U. S.	English		Occupation	Work		Months in the year	Days in the week	Hours in the day	Weekly wage
					Speak	Read		Home	Out				
	P.												
	H.												

Evidence of disease: Specify	Alcoholic	Insurance: Note amount with whom	
		Sickness	Life
P.			
H.			

Housing								Inmates				Income per week					Rent
Date	Room	With windows	Without windows	Bath	Clean	Light	Airy	Under sixteen	Over sixteen	Lodgers and boarders	Dependents	To s	From children	From parents	From lodgers and boarders	Other sources	Per week

USE LINES BELOW FOR SPECIAL NOTES ON OCCUPATION OR FOR DATA ON ADDITIONAL PREGNANCIES OR VISITS

REFERRED FOR FURTHER TREATMENT

Patient | Baby

SUMMARY

First visit	Last visit	Pre-natal	Post-natal	Total	Date of death	Cause of death

Digitized by Google

Notes

Advice

POST-PARTUM EXAMINATION (NOT LESS THAN FOUR WEEKS AFTER DELIVERY)

General | Breasts

Uterus: anteverted Retroverted Movable Fixed Well-involuted Sub-involuted

Perineum

Special comment on intercurrent disease

Notes

Advice

Digitized by Google

DISCUSSION

(Of Miss Stevens' paper)

Miss Winifred Fitzpatrick, Providence: I would like to ask if the nurses do the foetal heart examination.

Miss Stevens: Yes, they do. The nurse listens to the heart, on every visit, of every patient who is more than five months pregnant.

Dr. Worth Ross, Detroit: May I ask Miss Stevens how many mothers in her experience a nurse can efficiently take care of and if they have other duties that are strictly prenatal care?

Miss Stevens: The nurses do nothing but this maternal care. We began by thinking that a nurse could care for a hundred active patients. We have cut that down now from 50 to 75 active patients at one time, and that number varies with the number of foreign speaking women and with the distances the nurse has to travel in her particular district.

Dr. S. McC. Hamill, Philadelphia: May I suggest that the discussion be deferred until all of the papers have been read?

Chairman: You have heard the suggestion of Dr. Hamill. It has been moved and seconded that the reading of the papers be continued and that the discussion be thrown open after all of the papers have been read. Will all in favor signify it by saying aye? Those opposed? It is so ordered. We have heard from New York as to what is being done there along the line of prenatal care and now we will hear what is being done in the state of Massachusetts.

Digitized by Google

PRENATAL WORK IN MASSACHUSETTS

ROBERT L. DE NORMANDIE, M. D., Boston

In May of 1917, Dr. McLaughlin, who was then our Commissioner of Health, with his characteristic vigor and farsightedness took steps to aid the infants and children of Massachusetts by appointing a Committee on Child Conservation. This Committee determined to investigate all divisions of child conservation work. It was decided for the first year to consider only the child up to the school age. By thus limiting the first year's work, pre-natal and obstetrical care available throughout the State came into much prominence.

Nine public health nurses were appointed to make a survey of the State. The population of Massachusetts is roughly four millions. Ninety-two per cent of the population was surveyed, yet only sixty-two per cent of the communities were reached. The value of these surveys lies in the fact that they were made by trained, unbiased observers, hoping only by reporting facts to bring to light fundamental needs of the communities.

In speaking to-day I make use of these surveys, yet I do not wish anything I may say to be taken as an official statement in any way from the Committee, for many of my observations are based on personal investigations, and are personal opinions for which the Committee can in no way be held responsible.

The interest and enthusiasm that these surveys aroused was beyond all expectation. Everywhere co-operation was obtained and stimulus to child conservation given. Positions were created for forty-six nurses, twenty child welfare stations were opened, and eight new pre-natal clinics were begun as the direct result of this work.

As I look over these surveys, there are several things which stand out forcibly: they all are directly connected with prenatal and obstetrical problems, and I wish to take them up one by one.

First.— A most striking point in these surveys is the absolute lack of any organized prenatal work in the State. I would not have you believe that we do no prenatal work in Massachusetts, for that is not the case. Boston has several clinics; Fall Fiver, Worcester and Lowell have theirs; yet in these cities the clinics reach but a small

Digitized by Google

percentage of pregnant women. In Lawrence, Brockton, New Bedford, Haverhill, Pittsfield, Springfield and Holyoke — all manufacturing cities with large foreign populations — there is practically no organized work. From what I can gather from talking with physicians in many of the cities of the Commonwealth, the majority — the large majority — of pregnant women are seen possibly once before delivery. I am sure it is not an extravagant statement to say that many women have no medical care until they fall into labor.

The surveys also show that the visiting nursing associations are beginning to wake up to the need of this work, and are doing more and more. They also show that the Metropolitan Life Insurance Company has taken an advanced stand in this work. Their policyholders are given two prenatal visits by nurses. In not a few communities the visiting nursing associations do this work. The insurance company must feel that financially it pays to safeguard their policyholders. It will not be argued that a business concern does such work purely from humanitarian motives. One can scarcely believe that two prenatal visits would lower the mortality and morbidity rate as is stated. The final explanation of this improved rate may be due to the fact that some nursing organizations continue the visits.

Davis of the Boston Dispensary, in analyzing birth statistics from five Boston wards, has shown the great good which prenatal work does, and this brings me to the second striking fact: namely, the high death rate throughout the State in the first week of life. Davis showed there was a death rate of 34.3 in cases not receiving prenatal care, and only 11.5 in cases having prenatal care. This death rate is in relation to 1,000 living births. The surveys bring out this death rate with terrible force. It is striking for the first week, and of the first week the first day takes the heaviest toll. This high death rate can mean in all probability nothing but one thing: lack of proper nursing and medical care before and during delivery. We, at the Boston Lying-in Hospital, have found a similar improvement in our infant death rates as the result of our prenatal work; and we further have found because of our prenatal care that we have made our outpatient department service, except for the few accidents of obstetrics which no amount of prenatal care can prevent, one of practically normal obstetrics. The Instructive District Nursing Association of Boston, which is doing much prenatal work, has given me some most interesting figures on their work. This association in 1917 had 2,685

Digitized by Google

prenatal cases, and of these 2,376 were followed through and after-care given. The proportion of still births to live births was 1.02 per cent, and the infant mortality under two weeks was 11.90 per 1,000 births, while for the entire city of Boston the proportion of still births to live births was 3.36 per cent, and the corresponding infant mortality rate was 34.19.

The third point which the surveys bring up for thought is the lack of free and low-priced obstetrical hospital facilities. This need in Massachusetts is very urgent, for although there are many places licensed to take obstetric cases, the equipment of not a few leaves much to be desired. In fact, the whole method of licensing lying-in hospitals in Massachusetts is in my opinion most antiquated. Any place taking women for delivery must be licensed by the State Board of Charity. I have seen some very dirty places to which this board has given licenses. Rightly they should not be called hospitals, for some of them are only of one or two rooms with no equipment, sometimes without sanitary arrangements and lacking adequate fire protection. The State, however, gives these places the same right to look after obstetric cases as if they were the equal of the best equipped modern hospital. This situation is a disgrace to the Commonwealth.

The fourth point is the cause of death in the maternal mortality. Again and again eclampsia, septicaemia, and hemorrhage are the causes of death. All these to a great extent are preventable causes, and therefore some one should be held responsible. Only very occasionally will careful physicians have a death from any of these causes. Careful prenatal work will cut down the number of cases of eclampsia greatly, for in by far the majority of cases it is a preventable disease. Someone has usually been careless, either the doctor or the patient. Deaths from the two other causes can be prevented only by better obstetrics. In regard to deaths from puerperal sepsis, however, I feel that marked improvement would arise if puerperal sepsis were made a reportable disease in Massachusetts.

The fifth point of which I wish to speak is the midwives. I hesitate to mention before this association the word "midwife," for I know the discussion that it has in the past stirred up. Yet silence seldom improves such a situation.

In the cities and towns where there is a large foreign element the surveys showed that there were many midwives working. These

Digitized by Google

foreign women, who only are accustomed to using midwives, follow their wonted habits, and continue to use them, when available, in this country. In a recent letter from a most excellently trained man and one who is trying constantly to improve the obstetric situation in his city, this statement is made: "One-third of cases, about 1,000, delivered by midwives, mostly foreigners, but a considerable number of English patients still employ midwives. Supervision to some extent by the board of health nurses, thoroughly as regards eyes and filing of birth certificates. Most midwives have a physician that they call upon in emergencies."

The midwives, as they now exist, can not be expected to do any intelligent prenatal work; and yet the surveys do not show any large proportion of disasters scored up against them. This, I think, is true as regards the mothers, but I can not now say what is the result to the infants born under their care.

As in this city, so it is in many of the others; how many midwives there are I doubt if it is accurately known. Because it was found that there are many midwives working, the State Board of Health is about to undertake an investigation of their activities; and when this is finished it will be in an excellent position to make intelligent recommendations.

This, then, is a short resume of the prenatal situation in Massachusetts. It is far from what it should be and what it will be. All thinking physicians know, all nursing associations know, many of the people know what good prenatal care accomplishes. Then why is it that we in Massachusetts are without it?

It is, it seems to me, because we have not yet been able to educate the women of the child-bearing age to proper standards. They do not know what is their right. They regard the bearing of children as part of their lot in life, let it bring what it will. They do not realize that they must demand that they be carried through this most important time in their lives safely and without undue risk to themselves or to their infants. They accept the loss of their babies or even of themselves as inevitable. In some cases, though fortunately these are very rare, it *is* inevitable; yet throughout the country the former feeling has a firm grasp. This association must push forward a powerful propaganda to change public opinion toward obstetric standards. It is only recently that any attempt has been made to alter this opinion.

Digitized by Google

The women of the country must rise up and cry out that this useless, yes, criminal sacrifice shall cease. Until they do, until we let every woman know what is her right, no real improvement in the situation will come.

This association can and must be a powerful aid in the education of our women. Constant reiteration of the facts — plain talks to the public, to the fathers as well as to the mothers — will accomplish much. The country at large is in a most receptive mood for child conservation work, and the start already given it must not be allowed to falter.

I am firmly convinced that the logical organization to do the prenatal work in a community is a nursing one. The nurses of such an organization must be thoroughly trained public health nurses. They must be able to approach a case from all sides. In many families is not the question of proper food — a properly balanced diet — a possible saving in the family budget and therefore one of the fundamentals in the management of prenatal cases?

I doubt if it is advisable except in large cities to have separate prenatal clinics. In the majority of cases they can be held as a part of a health center, thereby to some extent reducing the necessary personnel. At present it is difficult to obtain the physicians' coöperation; they do not feel that they can give up their time; but with planning and thought and public opinion aroused I am sure the necessary coöperation will come. The nurses can be so trained that they do the greater amount of work, reserving for the physician those cases that show the slightest abnormality. No clinic should be run without a doctor affiliated with it, and it further should have connection with a hospital where all necessary cases may be referred without delay.

In towns clinics are obviously impossible. Here the nurses should work in close coöperation with the physician the patient has chosen. To me it is astonishing the apparent hostility many physicians have to this arrangement. Properly worked out it should save him much time and prevent many complications. Is this hostility due to the fact that the physician fears his fees will be reduced? This can not be the fact, for it should work out just the opposite; and also in not a few cases it will save him from much deserved criticism.

In rural communities it is almost impossible for pregnant women to see physicians as they should, and here the nurses' work is invaluable. One small rural community will not have enough work to

Digitized by Google

justify the employment of a nurse, and in the sparsely settled areas the towns should group themselves toward mutual help. This scheme is being worked out most encouragingly on Cape Cod, and it eventually will mean the saving of much suffering and many unnecessary sacrifices.

As regards the midwives, I frankly do not know what to do. The situation is an anomalous one. Theoretically they ought not to exist; practically, they do. In Massachusetts we calmly close our eyes to the midwife — she has no status. If she reports births, she can be prosecuted for practising medicine. She therefore either does not report the births or asks some unscrupulous doctor — and I regret to say we have them — to sign the birth certificate for her, and he obtains the twenty-five-cent fee. Why this twenty-five-cent fee? The law should read that if a birth return is not filed prosecution and fine will follow. The importance of birth registration is much more appreciated since the war because of the question of citizenship and of the passport demands. Not until we have complete birth registration will we be able to begin at once efficient infant welfare work.

But to return to the midwife for a moment. It is obviously impossible for a nurse to take orders from the midwife, yet nurses constantly look after cases with physicians who do consistently bad work — not infrequently worse work than the midwives do. The midwife is present; we must not ignore her. If we drive her out, we must give those who use her something in her place that is acceptable to this group. Will maternity insurance help the situation? Dr. Champion will doubtless answer that question for us.

Earlier in my paper I suggested making puerperal sepsis a reportable disease. I cannot but feel it would help the tragic situation which exists throughout our country. If physicians felt that every case they had which developed sepsis would be investigated, then I am sure they speedily would mend their ways. Take *ophthalmia neonatorum:* it was made a reportable disease, and investigation of each case followed up promptly by the State Board of Health, and the result was marked improvement at once. Dr. Meigs' report on Maternal Mortality, startling as it is, is not new to those of us who have been doing consultation work. Knowing the facts, we must insist that this terrible loss of life cease at once, and it is with this hope that I bring to your consideration the importance of making puerperal sepsis a reportable disease.

Digitized by Google

This, then, is a rough sketch of the prenatal work as I see it. It is not an encouraging situation, yet it is not without hope. The beginnings that have been made have been accepted with enthusiasm, and are foundations for further development. A vigorous educational campaign must be instituted. If prenatal care is to be within reach of every pregnant woman, the nursing organizations are, I am confident, the ones to carry it out. The community nurse who knows her district probably finds the pregnant woman the earliest. She has the confidence of this group, and with care can lead the new patient along the desired road. Intensive community work, active coördination of all public health activities will without doubt bring about what we all so earnestly are seeking.

The Chairman: We have heard Dr. De Normandie's report on prenatal care in Massachusetts, with great interest. The next paper will be by Dr. Merrill E. Champion, the Director of Division of Hygiene of the State Department of Health of Massachusetts, who will discuss maternity benefits and its bearing on prenatal care. That subject brings to my mind some of my recent experiences in medical work in France. From the point of view of prenatal care there was one phase of it which was quite different from anything I have ever done in this country: that is — every pregnant woman with whom I had to deal came to me about a month before confinement with a certificate which she wished me to sign stating the approximate date of confinement so that she might receive the maternity benefit which was her due. She received money for four weeks previous to her confinement. That is something to which we are not accustomed in this country and yet is seemed to me that it was of great value to the poor women in France. It will be very interesting to us all to hear this paper.

Digitized by Google

MATERNAL BENEFITS

MERRILL E. CHAMPION, M. D., DIRECTOR, DIVISION OF HYGIENE, MASSACHUSETTS STATE DEPARTMENT OF HEALTH,

Boston

The great reproach of preventive medicine is the infant mortality. Almost equally a reproach is the mortality among women between 15 and 44 years of age, from causes directly referable to pregnancy and child-birth. Some method must be found of lowering both of these death rates. Maternity benefits have been suggested as a feasible means of accomplishing this result.

A glance at a very few figures will give an idea of the size of the problem. During the year 1916 the deaths of infants under one year of age, in the United States, were 105.4 per thousand estimated population, and in 1910, 131.7. This represents a considerable decrease and this decrease is also shown by the following figures for the previous seven years.*

PER CENT OF TOTAL INFANT DEATHS TO TOTAL DEATHS IN REGISTRATION STATES, EXCLUSIVE OF NORTH CAROLINA

	1916	1915	1914	1913	1912	1911	1910
Per cent of deaths under one year of age to total deaths	16.1	16.6	17.3	17.9	17.7	17.9	19.4
Total deaths under 1 year	100.0	....	....	....	....	....	.....
Less than 1 day	15.6	16.0	14.6	13.3	12.7	11.8	9.8
1 day	5.0	5.0	5.1	4.9	5.2	5.3	4.9
2 days	3.8	3.7	3.8	3.4	3.5	3.3	2.9
3 to 6 days	7.2	7.1	7.3	6.7	6.9	6.8	6.1
1 week	6.0	6.2	6.3	6.2	6.2	6.1	5.7
2 weeks	4.4	4.7	4.8	4.7	4.8	4.8	4.6
3 weeks (less than 1 month)	3.5	3.7	3.7	3.7	3.9	3.7	3.8
1 month	8.8	9.0	9.2	9.5	9.6	9.8	9.9
2 months	7.0	7.3	7.6	7.7	8.0	7.9	8.4
3 to 5 months	16.2	16.3	16.7	17.5	17.3	17.7	19.3
6 to 8 months	12.4	11.9	12.0	12.5	12.4	12.8	14.1
9 to 11 months	10.1	9.1	9.1	9.9	9.6	9.9	10.7

* Different methods of computing statistics for various years make it impossible to obtain comparative detailed statistics of death rates under one year on the basis of estimated population or live births.

Digitized by Google

The rate, however, is still alarmingly high. Similar statistics from New Zealand and from various cities in this country show that our present high rates are unnecessary. New Zealand, largely through the use of public health nurses and intelligent hospital care, has reduced its infant mortality from 8 per cent in 1902 to 5 per cent in 1912. One New Zealand city, Dunedin, cut its infant mortality in half in twelve years, from 8 per cent to 4 per cent.

So much for the total infant mortality. If we turn, however, to the mortality during the first few weeks of life, the small measure of comfort we might have taken from the reduction of the total infant mortality vanishes. These mortality figures are not coming down but rather are going up, yet the mortality represented by the figures of the first month bulk to at least one-third of the total infant mortality. In other words, we are making no headway on at least one-third of our whole program. To quote the United States Mortality Statistics Report for 1916, "Infant deaths are every year forming a smaller and smaller part of total deaths, but — the decreases have occurred principally after the second week of life. Diarrhea and enteritis is becoming a less important factor, but premature birth and injuries at birth form considerably larger per cents of the total in 1916 than in 1910." The rate for all causes under one year of age has declined from 131.7 in 1910 to 105.4 in 1916 (per 1,000 estimated population), and the rate for diarrhea and enteritis has declined from 37.7 in 1910 to 24.1 in 1916. On the other hand, a few increases appear: Premature births, 17.5 in 1910 to 21.2 in 1916; and injuries at birth, 3.2 in 1910 to 4.4 in 1916. This is also shown by the fact that in 1910 the percentage of total infant deaths to total deaths for the registration states, exclusive of North Carolina, was 19.4 as compared with 16.1 in 1916, a fairly satisfactory drop; while, if we consider only the deaths under one month, a most unsatisfactory rise is shown in that 37 + per cent of the infant mortality fell in this group in 1910 and 45 + per cent in 1916.

This same unsatisfactory state of affairs is true of Massachusetts in common with the rest of the country and forms one of the reasons for the consideration in this State of some remedial effort.

The statistics of maternal mortality are also startling when we consider the progress we should have made during recent years. According to Dr. Meigs, "In 1913, child-birth caused more deaths among

Digitized by Google

women 15 to 44 years old than any disease except tuberculosis." The United States and Massachusetts figures follows:

UNITED STATES MATERNAL MORTALITY

CAUSE OF DEATH	Total number of deaths, 1916	Death Rate Per 100,000 Population				Average, 1906–1910
		1916	1915	1914	1913	
The puerperal state	11,642	16.3	15.2	15.9	15.8	15.5
Accidents of pregnancy	985	1.4	1.4	1.4	1.4	1.7
Puerperal hemorrhage	*1,118	1.6	1.5	1.5	1.6	1.0
Other accidents of labor	*1,212	1.7	1.5	1.4	1.3	1.3
Puerperal septicemia	*4,786	6.7	6.3	7.1	7.2	6.8
Puerperal albuminuria and convulsions	3,087	4.3	4.0	4.0	3.8	3.4
Puerperal alba dolens, embolism, etc.	415	.6	.6	.5	.5	.1
Following childbirth (not otherwise defined)	34	.0	.1	....	....	.....
Puerperal diseases of breast	5	.0	.0	.0	.0	.0

* Approximate.

MASSACHUSETTS MATERNAL MORTALITY

CAUSE OF DEATH	Total number of deaths, 1916	DEATH RATE PER 100,000 POPULATION				
		1916	1915	1914	1913	1910
Puerperal septicemia	159	4.2	2.9	2.9	2.8	3.1
All other causes	366	9.7	9.6	11.9	10.2	8.8
Totals	525	13.9	12.5	14.8	13.1	11.9

The 1917 figures for Massachusetts show the same upward trend, being 16 per 100,000 population.

It is pretty well understood now that the maternal mortality and the infant mortality of the first few weeks are largely dependent upon the care bestowed upon the prenatal period and upon the character of the obstetrical service the mother receives. There is no time in a discussion of this length to enter into the causes underlying the present lack of prenatal care nor those responsible for the poor obstetrics which is now undoubtedly practiced. The exact relationship of existing

Digitized by Google

medical education and of mid-wives to the question of infant and maternal mortality is yet to be ascertained.

Having drawn up our indictment of conditions as they are, what is there to offer by way of relief? Maternity benefits have been put forward as a possible answer to this question.

The maternity benefits which are to be discussed in this paper must be sharply differentiated from health insurance schemes. The underlying principle of maternity benefit as it has been agitated in Massachusetts and elsewhere is this: A woman who bears a child and rears him to be a good citizen is doing an essential community service. If, for any reason, she must call upon the community for help in caring adequately for this child, she is not asking for charity but is merely taking advantage of one of the services which the community offers for its own protection. Many people say that this is simply a sugar-coated way of dispensing charity; it does not seem so to the writer. There is an economic as well as a psychological difference between Maternity Benefits and almsgiving.

It may be interesting at this point to consider what foreign countries have done in the direction of maternity benefits. We find that a number of European countries, such as England, France, Italy, and others, as well as Australia, have attempted in various ways to deal with the problem. They have not all followed the same method. Australia, for example, simply grants a specified amount to the mother, on proof of the birth of the child. Recent reports indicate that practically all mothers in Australia avail themselves of this grant. This law went into effect in 1912.

Under the French law of 1913, any woman dependent upon her earnings is granted a daily allowance for a period of eight weeks at child-birth, on condition that she abstains from work. She may obtain an additional allowance if she nurses her child.

The Italian law (passed in 1910) provides for benefits for women engaged in certain lines of industry.

It will be seen that the three countries, Australia, France and Italy, are operating maternity benefits independently of any insurance system.

The system maintained by Great Britain is more complicated than those referred to above. A law passed in 1891 forbade the employment of women for four weeks after child-birth. It did not, however,

Digitized by Google

provide for any financial assistance during this period. In 1911, the latter defect was remedied. Certain other changes were made in 1918. The scheme is, however, one of insurance rather than of maternity benefit, in the sense in which I have already outlined it. The beneficiary contributes to the fund from which the benefit is derived.

If we turn to America we find a maternity benefit system in operation in the Province of Saskatchewan in Canada. Quoting from the Provincial Commissioner of Public Health, "When any expectant mother, who happens to be residing where there is no *resident physician,* makes an application to the Commissioner of Public Health and states that, for financial or other reasons, she does not see her way to obtain the necessary assistance in her confinement, a grant of $25.00 is made to help her. A cheque for $10.00 is sent at once to assist in procuring the necessaries for the event and the sum of $15.00 is paid to the physician who attends her." It will be seen that this differs from the Australian system in that it is limited to rural districts and distributes only part of the benefit in cash to the mother.

Avoiding the fine points of the different systems under discussion, it will suffice to point out one detail common to all of them. That is, the cash benefit. In some countries more emphasis is laid upon this than in others. In Australia the cash benefit is all there is to the system; in certain other places, notably England, and Saskatchewan in Canada, medical services may also be furnished.

The point we next come to — and the most important of all — is this; have these systems produced results? The whole proposition is one of health; we should have a right to demand results in the shape of a diminution in maternal mortality and in infant mortality, especially during the first two weeks.

It must in all honesty be said that results have not borne out expectations so far. This is notably true in Australia. It would seem, nevertheless, that the cause is not far to seek. The inference is simply that people do not make the use of the cash benefit that was intended and which is calculated to produce results. Apparently, maternity benefits, apart from cash grants, have not yet been fully tried out.

Various suggestions have been offered for an act which would prove workable for the United States. The bill introduced into Congress in 1918, "to encourage instruction in the hygiene of maternity and infancy," was really in a way, a sort of maternity benefit scheme whose

Digitized by Google

provisions would be carried out jointly by federal and state authorities. An appropriation by the federal government would be contingent upon an equal appropriation on the part of the state legislature.

This method of financing is in some ways a desirable one, though it has obvious disadvantages. As originally drawn up, however, this proposed legislation had one serious defect. It made possible the creation within the state, of a special maternity commission to handle the disbursements provided under the Act. This was virtually asking for the establishment of a second state health department. Deplorable results might well be expected under such a system. There is altogether too great a centrifugal tendency as it is. Undesirable as this is among private agencies, it is intolerable in state agencies.

A similar bill introduced into Congress this year, places the administration of the Act under a Federal Board of Maternal and Infant Hygiene, consisting of the Secretary of Labor acting as Chairman, the Chief of the Children's Bureau acting as the executive officer, the Surgeon-General of the United States Public Health Service, and the Commissioner of Education. In order to secure the benefits of the Act the various states are required to create a State Board of Maternal and Infant Hygiene, except in states where the State Board of Health has a child welfare department. The Federal Board may require the State Boards to appoint advisory committees, both state and local, members to be selected by the State Boards, and at least half of them must be women.

From a legislative point of view, there is an inherent weakness in any proposal for maternity benefits. This results from the difficulty experienced in making any accurate estimate as to what a system of maternity benefits would cost. We know, for example, that the Australian plan costs about three million dollars a year. This system is however, a strictly cash benefit scheme. One cannot make an accurate estimate from charity statistics, for this is a health, not a charitable proposition, and is intended to appeal to a wider class than those who are merely objects of charity. As a matter of fact, the key to the situation is the family physician. He it is who does most of the free obstetrics, aided often by the district nurse. The practising physician, on the other hand, rarely keeps accurate records and so, cannot, if he would, help us with statistics, to the extent we might wish. It is the writer's belief that statistics as to the number likely to avail

Digitized by Google

themselves of maternity benefits are bound to be fallacious. Despite the business man's desire for accurate figures, it would seem that the urgency of the need to reduce maternal and infant mortality would have to justify an appeal to a trial to settle the feasibility of the scheme. Many projects of far less promise are based on less sufficient evidence. As Miss Lathrop well says in her paper on "Public Protection of Maternity," "If a simple maternity benefit law were in operation we should learn more about the way to deal with the matter than we shall learn by years of discussion."

Bearing the facts already mentioned in mind, let us consider for a moment a plan which seems at present to show some likelihood of being adopted. The bill for Maternity Benefits, introduced into the Massachusetts legislature in 1919, has been moulded by many hands into a shape which seems to constitute a workable plan. Briefly summarized, the bill is as follows: Maternity benefits are to be considered strictly as a health matter; the results aimed at are a reduction of the maternal and infant death rate of the state. Furthermore, implied in the terms of the bill, the bearing of children is considered as an important function which, to a certain extent, makes the State a debtor to her who performs this duty. If the family is not able to manage alone the financial burden involved, it is to the interest of the State to help. Under these conditions there is no charity involved. Consequently, everything should be done to avoid attaching the stigma of charity to this form of assistance. Under the terms of the proposed law the administration of the Act would rest in the hands of the State Department of Public Health which would be empowered to furnish medical, nursing, or hospital care. Prenatal supervision would be assured by the provision that in order to obtain the maternity benefit, the propective mother must apply for aid at least three months before the expected birth of her child.

It must be conceded that to carry out such a comprehensive plan many complex problems will be encountered and must be solved. For instance, what part will the midwife play in the program? We are now making an investigation of midwifery in Massachusetts and may later be able to answer this question. Again, how will adequate medical service be obtained without undue discrimination against certain doctors? Where shall we get the nurses to do the prenatal visiting? Have we enough obstetrical hospitals to take care of our mothers,

Digitized by Google

especially those in rural districts? These problems, and many more, must be solved intelligently. The result will be seen not only in terms of lowered infant and maternal mortality, but also in more public health nurses, better doctors, and better hospitals.

What hope are we justified in having of accomplishing to any worthwhile extent by such means, the reduction of the infant and maternal mortality? Certain experiences apparently point towards a belief that this can be done. For example, the Boston Instructive District Nursing Association tabulated certain results obtained in their work in 1918. Comparisons were made between 2,621 cases where prenatal care was supplied and 1,863 cases where no prenatal instruction was given. In both instances, the mothers had the same postpartum care. In the first group, that with prenatal care, the infant mortality under the age of two weeks was less than half that in the second group, where no prenatal care had been given. The stillbirths were two to three in favor of the cases receiving prenatal care.

The same results are shown on a larger scale by the work in New Zealand. Miss Lathrop in the Fifth Annual Report of the Children's Bureau, calls attention to the contrast in results obtained under the Australian and New Zealand method of attacking the infant mortality. New Zealand, to be sure, has no system of maternity benefits but her method of handling the problem by means of nursing service, instruction, prenatal care and hospital care, is precisely that proposed under the suggested scheme for maternity benefits in Massachusetts.

Under this system New Zealand has cut her infant death rate from 8 per cent to 5 per cent in ten years. This fact should justify a fair trial of a similar plan, but experience only will show whether such a state fostered plan will produce results at a reasonable cost.

DISCUSSION

The Chairman: The discussion of Dr. Champion's paper will be opened by Dr. Richard M. Smith, Boston:

Dr. Smith: I want to emphasize one or two points that seem to me are worth while bearing in mind. It is interesting to consider the development of the study of infant mortality. The first interest was in the question of the feeding, and the reduction of infant deaths has been in large measure in the gastro intestinal diseases. At the present time that particular problem seems to be on the way to being solved. We need to continue the good work already being done, especially to continue the emphasis on the desirability of breast feeding. With the further consideration of infant mortality, it has become more and more apparent that great need now is to reduce the death rate in the first few days or weeks of life.

Digitized by Google

That means prenatal and obstetrical care. I believe that as we look at this problem more and more, we shall be convinced that we can't solve it unless we provide some means whereby the home can be taken care of during the period of confinement. That means that some way must be provided in many families, for help from outside and largely financial help. Whether as Dr. Champion suggests the State maternity benefit is going to solve that problem or not remains to be seen, but I believe Miss Lathrop is absolutely right in saying we shall never be able to answer that question until we try. If we are going to make any progress the thing to do is to adopt some scheme and put it in operation and we will find out whether a modification of that scheme is right or whether we shall have to adopt an entirely different procedure. I hope that in Massachusetts we shall be able in the next winter,—and there seems to be reasonable ground for hope—to pass this maternity benefit measure. In a year or two we will be able to say whether it is workable or not, whether it produces results or not or needs modification in various ways.

I want to emphasize one point about this particular bill which Dr. Champion mentioned, which we must bear in mind, that this kind of benefit does not include any suggestion of pauperism or charity. We don't consider that children going to public schools are in any way objects of charity. Health is just as important as education and it is just exactly as much the duty of the State to provide proper health as it is to provide suitable education. The State must recognize and the community must recognize that it is just as right for the mother to receive aid from the State in bringing a healthy child into the world as for the family to receive aid in educating the child after he is born.

The Chairman: I will ask Dr. Champion to open the discussion on Dr. De Normandie's paper.

Dr. Champion: The thing that has interested me very much in prenatal care is the fact that the general public has not been educated to the point of being willing to pay for it. So far as I know practically all prenatal care is being given free. This shows that we have not as yet succeeded in getting the mothers, and the doctors too, of course, to realize that prenatal care is worth while. I think that if the maternity benefit law, for example, were to go into effect, the mere fact that the State has recognized the value of prenatal care would help to raise its importance in the eyes of the general public, and after all, we cannot go very far in advance of what the men and women in the street really understand. State health officials feel that perhaps more than anybody else does. I should like to mention one particular thing that we have tried in Massachusetts. We were not the first to try it by any manner of means. I refer to the use of State prenatal letters. We send out a series of nine prenatal letters to any mother in the State who applies for them or to any mother who has a friend or physician who will apply for them. We are sending out now more than 1,000 a year and we are adding to our list all the time. We have no regular system of getting the names of these mothers: We simply send them to those whose names are sent in to us. We have also started a system of postnatal letters carrying the mothers along from the prenatal period until the baby is a year old.

The system of licensing lying-in hospitals in Massachusetts, referred to by

Digitized by Google

Dr. DeNormandie, is pretty bad but the reason for the present system is that our State Board of Charity is the body which does most of the licensing and because lying-in hospitals are considered as charitable institutions. As a matter of fact, lying-in hospitals are supposed to be inspected by the local board of health before being licensed by the State Board of Charity. In Massachusetts we have 354 cities and towns, and being a state devoted entirely to home rule, each one of these 354 cities and towns is a law unto itself. The State Health Department has no control over them excepting in an advisory capacity. The result is that the health standards for lying-in hospitals are going to vary much depending upon the enlightenment of the particular town with respect to public health activity. A little town with a population of 80 odd people, which we have away up on the top of the Berkshires, has just as much sovereign authority as has Boston with three-quarters of a million population. The present system has some value but I hope that sooner or later the State Health Department may have some say in making standards for lying-in hospitals. Through some peculiar quirk in the law, the State Department of Health is now allowed to examine the lying-in hospitals when they take six or more patients in a year.

Dr. Taliaferro Clark, U. S. Public Health Service, Washington: I think we have no better illustration of the interrelation of all forms of health protection than that furnished by measures of prenatal care. For instance, we are all familiar with the great reduction in infant mortality following the introduction of a pure water supply into cities. In other words, no matter how intensive a supervision is maintained over infants of one year of age the mortality rate in this special class of the population will continue high unless there is maintained at the same time adequate sanitary supervision of the population as a whole. In the same way no matter how carefully we instruct expectant mothers in prenatal care the deaths of mothers in childbirth and of children under one month of age will continue high if cognizance is not taken at the same time of general measures for the protection of the public health. The effectiveness of venereal disease control measures, the completeness of the solution of the malaria and hookworm problems or other allied endemic diseases will exercise a very wonderful effect in reducing the mortality of mothers and of young children.

Dr. F. L. Adair, Minneapolis: I would like to say a few words regarding maternal welfare. I like to distinguish in my own mind between pre-natal care and maternal welfare. Pre-natal care, it seems to me was primarily originated to cut down infant mortality. Strictly speaking it is the effect which the care of the mother has on the off-spring. It seems to me we should also recognize that maternal welfare, conducted primarily for the welfare and education of the mothers, is the larger program. It is not commonly recognized or has not been until recently, that maternal welfare constitutes an integral part of any public health program. It seems to me that the most fundamental part of any public health activity is that which deals with the mother. There are various problems that cannot be solved by prenatal care. It does not deal with potential off-spring. It does not deal with the problem of sterility which is included in that of potential mothers. It does not deal with the various other conditions which closely touch the problem of maternal welfare. The problems of "T B" and venereal diseases in pregnant

Digitized by Google

women are among these. It is therefore important to differentiate clearly between pre-natal care and maternal welfare. Maternal welfare is a much larger program than pre-natal care and it seems to me should make up a very important part of any public health program. I have had in the past year a very good opportunity for study and thought along these lines by both observation and work in France and I must say that we must awaken to problems that we have never fully realized before. In Minnesota, we have now made the beginning of a maternal welfare program not only in the city but in the rural communities and Dr. Huenekens and I hope to lay the foundation for a fairly complete maternal and child welfare program not only in Minneapolis, but in the rural communities of Minnesota. The medical problems involved, of course, we are all familiar with but I would like to say this, that without prenatal care infant welfare has practically not touched the still-birth problem or that of early infant mortality. I think it could be concluded from the few statistics that we have as well as from any careful thinking out of the problem, that this mortality can only be touched through care of the pregnant woman. Some of the other problems I have already touched upon. The number of premature births also can only be cut down by care of prospective mothers. Abortion and miscarriage can only be handled through care of future mothers. Now it seems to me the solution of these medical problems in a large way can only be accomplished by the proper care of the woman not only during pregnancy but during the lying-in period.

There are vast social and economic problems which it is useless to attempt to touch in the short time alloted for discussion. As an obstetrician I have to admit before this organization that we have been very negligent of public welfare activities. I do not mean that all have but I mean obstetricians as a group, as a class, and I think it is about time that an awakening came. Now I would like to propose that this organization through some resolution presented to the American Gynecological Society should call attention to the importance of these problems as national problems, as problems bearing on public health, as problems bearing on infant welfare, and ask their hearty co-operation in an attempt to develop through this organization a complete maternal and child welfare program.

The Chairman: Any further discussion?

Dr. G. T. Barth, Milwaukee: Just a question and a suggestion. We have establish a rule which we are trying out in Milwaukee at this time, i. e., that all children born must remain with the mothers three months. The effect of such a rule upon the early infant death rate is very evident. The effect on the importation of babies in the large cities and farming them out to families is also evident. Now the question: Can any one here tell me whether such a rule has been established in any other city, and if it has how has it worked out?

The Chairman: Is there any one here who will speak for the state of Maryland?

Dr. J. H. M. Knox, Baltimore: According to a ruling of the Maryland State Board of Control every baby born in the state must be nursed by its mother for three months.

Dr. De Normandie, Boston: How do they enforce that law?

Dr. Knox: It is being enforced in the baby farms and small institutions by

Digitized by Google

means of licensing. If the law is not carried out the license is refused for the following year.

Dr. G. T. Barth, Milwaukee: I may add what we did in Milwaukee just before I left. We swore out a warrant for one of these lying-in institutions which attempted to take in a mother without being properly supervised by the city authorities. That eliminates all lying-in institutions that might be run without the knowledge of the city authorities.

Dr. Florence Sherbon, Kansas: May I ask who supports these mothers for these three months while they are nursing the children? Must these lying-in hospitals?

Dr. Barth, Milwaukee: In many instances the father of the child or some member of the family pays the bill, or the institution permits the mother to work off the bill or the city will provide care for them while under its charge. The financial consideration has not been the difficulty but the protection of the misguided girl's reputation. This, I may say is a very recent — I don't know what effect it has or is going to have on infant mortality. We hope to see an improvement but it is of so recent a date that I can give no statistics and no definite information on how it is going to work out.

Dr. Sherbon: It seems to me that is creating a very large subsidy.

Dr. Waldron, Yonkers: Returning to the subject of Miss Stevens' paper, I would like to ask if you use the milk station nurses as prenatal nurses, or should they be independent nurses? We tried to get our milk station nurses to take up the prenatal work but without success. It would seem that as they come into contact with the mothers they would have their confidence, but for some reason they don't seem to get along with the prenatal work.

Miss Minnie H. Ahrens, Chicago: We have had the same experience. It does not seem possible for the nurse who does the infant welfare work to do the prenatal work also. It is not because the nurse is not able to do it, but it is due to the fact that she has so much to do in the postnatal work that she can not give adequate time to the prenatal work, because the prenatal work requires even more time than does the postnatal work. What Miss Stevens said in her paper is very true. The prenatal work requires visit after visit, often only a friendly visit but those visits must be made and the confidence of the mother must be secured before anything can be done, and the nurse doing postnatal work rarely has the time for visits of this character.

Dr. Clark: I would like to make one suggestion along the line of the remarks by Miss Ahrens, which bring to my mind forcibly the necessity of employing nurses in sufficient number or else limiting the district in which they work. In other words, there is a limit to the number of families which the public health nurse can properly supervise. If this number be increased by reason of the fewness of the nurses employed or the size of the district many things will have to be neglected or left undone altogether. As regards prenatal work, I feel that the nurse who can go into the home and make friendly contact with the mother is the best equipped nurse to do postnatal work. Therefore, let us not indulge in too great a specializa-

Digitized by Google

tion of nursing work but rather advocate the thorough training of nurses for public health work and their employment in numbers sufficient to do all classes of child welfare work effectively.

Dr. S. Josephine Baker, New York: As a matter of practical importance I want to speak on the subject of having the postnatal worker do the prenatal work. We have found in New York city that that is impracticable. We all agree with Dr. Clark that we ought to have enough nurses but I have yet to see the place where that ideal is realized. We must work with the material we have, not the material we would like to have. In a city such as New York we find a nurse can care for about 150 babies or from fifty to seventy-five prenatal cases, and we find that the work is so intensive in its nature that simply as a matter of expediency it is necessary to have the prenatal nurse entirely separate from the postnatal nurse. That does not mean, of course, that in certain rural communities the nurse could not do it all, nor does it mean that a nurse is not capable naturally of doing it all. It means simply that you are saving time and money if you do not ask her to do it all. It is a very practical point if you are limited in the number of your nurses not to try to combine your work.

There is a subject here that has been touched upon and is always touched upon in our meetings, although I always hope it is going to be avoided. That is, of course, the midwife question. At the meeting in Washington last Spring at the International Health Congress, Dr. Chapin read a most interesting paper on the midwife in which he said — I hope I am not misquoting him — that reports from many places, in fact all investigations they had made, showed the midwife had fewer stillbirths, fewer cases of puerperal septicaemia and more normal cases, and yet that she should be eliminated on general principles. That is a good deal the attitude I think most of us take and theoretically it may be right but, practically, we are face to face with actual conditions of midwife practice. I hope I am not misquoting my friend Dr. De Normandie when I say that at least ten years ago Massachusetts was wondering whether they would take up the midwife question and they are still wondering. He has stated that they are prosecuting the midwife for reporting births and are still undecided as to how they are going to solve the midwife problem. I can tell him that there is only one way to solve the midwife problem, and that is to face it. Do it. Come out into the open and see who your midwives are, then raise them to such a standard of practice that you will eliminate the incompetent ones automatically. The practice of midwives is a question of practical importance, and particularly with reference to the reduction of the maternal mortality rate. Two years ago Dr. Meigs of the Children's Bureau in Washington made a survey of the cities of the United States with regard to their maternal mortality rates. That survey, I suppose, is familiar to you all. I want to call your attention to the fact that Dr. Meigs reported that every city in the United States that had been investigated showed an increase in its maternal mortality rate during the last ten years except New York city, which showed a decrease of fifty per cent. Now, I do not believe for one minute that the doctors in New York city are any better than the doctors of other cities. I do not think we have any corner on medical ability, although of course we have good doctors and are proud of them, but the only way in which New York city differs from the other cities is that we do require a preliminary education for our midwives.

Digitized by Google

We have a midwife school under city control, with a six months course, and do not issue licenses to practice to any midwives who are not graduates of that school or of accredited European schools of equal standing. This is the only essential difference between New York city and the other cities, yet the results have been that in all the other cities the maternal mortality rates have gone up and New York city's has gone down. The plain lesson of that is that you are not going to solve the problem of the midwife by discussing whether or not you are going to solve it. You can solve it only by meeting it. We had three thousand midwives in New York city in 1916, while to-day we have sixteen hundred. In 1917 they reported fifty per cent. of our births; to-day they are reporting thirty-seven per cent. We are eliminating them in the only way I think they can ever be eliminated, that is, by making the standards so high that only the best equipped can possibly remain.

Dr. Worth Ross, Detroit: We have a solution of the midwife question in Detroit which is I think exactly along the line of that in New York city. A few years ago considerable more than a third of the births ranging from 25,000 to 30,000 a year were reported by midwives. Now under careful supervision and elimination of the inefficient midwives the number is reduced to something like 25 per cent. We do not feel that the elimination of the midwife is indicated or desirable. The important thing is to eliminate the inefficient midwife and raise the standard of those remaining. Our Department of Health is receiving intelligent co-operation of the licensed midwives who refer their babies and mothers to the clinics and are very careful to decline to accept any abnormal cases. Education rather than complete elimination seems to me to be the proper way to meet the problem of the midwife.

Dr. E. A. Hines, State Board of Health of South Carolina: We have been hearing very important results from the East and other sections of the country. I want to speak just a moment about the section in which you are meeting, the South, and in reference to the midwife question. In South Carolina we are now making a survey to determine the number of midwives we have and in nine of our counties we found that we had 100. Probably there are 500 midwives in South Carolina. Maybe more. There are about 900 active practicing physicians in South Carolina. The A. M. A. directory gives 1,433 doctors, of course, not all in active practice. That is the proportion in which we have the doctors to midwives in our State. On October 22d, the State Board of Health of South Carolina, recognizing the excellent work in the State of New York, practically adopted the rules of the sanitary code of the State of New York. We have wide discretionary power in our State laws, not surpassed by any State in the Union. The State of New York, outside of New York city and Rochester as late as August, had about 484 midwives. We have more than that in the State of South Carolina, so we believe that by the activity of our Child Hygiene Bureau, recently established and doing most excellent work, and through the public health nurse system which we have in good working order, we will educate those midwives who can stand it and eliminate those who cannot. We feel that we are beginning to solve the problem as New York State has done.

Dr. W. H. O. Hoffmann, Chicago: What is the difference between a prenatal

Digitized by Google

and an obstetric nurse and a very educated midwife? If anybody can explain that to me I would be very thankful.

Miss Stevens: I can't see there is any possibility of confusing the two. A nurse never does the delivery. A midwife tries to do the delivery and never does anything else. The public health nurse is trained to go into the home and tackle every problem in that home that affects health. A midwife is not trained to go into the home except to do the delivery. I can't think how they could possibly be confused. How is there anything alike about the nurse and the present type of midwife?

Mr. Frederick S. Crum: Everybody seems to be against the midwife. It does seem to me that there is a word to be said for the midwife, if she is especially qualified. In the city of Newark we have a large number of prospective mothers who prefer the midwife to a male doctor and that is a social condition which must be recognized at the present time, at any rate. Many Italian mothers much prefer a midwife to a male doctor. More than that, a midwife in Newark reports 100 per cent of the births she attends. The local health department has absolute control over the midwife which it does not have and probably never will have over all practicing physicians. Practicing physicians in Newark do not report all of their births and never have. They do not fully report many other facts that they ought to report and probably never will until they are educated beyond the present conditions. More than that, the midwives are controlled in various other ways, along lines which cannot be adopted as regards the physicians. I do not happen to be a physician, so I can speak and yet remain within ethical limits which are sometimes so restricted that physicians do not feel at liberty fully to express themselves.

Miss Sara B. Place, Chicago: May I say one word concerning the attitude of Italian mothers to male physicians. One district in Chicago where we have worked out a prenatal clinic is in a strictly Italian section. We have attempted the clinic from the point of view of education and just the moment those mothers know and have confidence it makes no difference with them whether they are cared for by a woman physician or a man physician, and those clinics have been successful.

The Chairman: One point has been brought out in the discussion that has not been followed up. That was as to a possible resolution from this organization to the American Gynecological Society. Is there any discussion on that subject?

Dr. Richard Smith, Boston: May I speak to that suggestion just a moment? Many of us feel the proper solution of the midwife question has not been found. We are all agreed I think that we are quite as much in need of educating the inefficient doctor as of making competent midwives. It seems to me that sometimes in discussing the midwife question we are discussing the smaller part of the problem. Perhaps in Massachusetts we are not doing the right thing in not licensing the midwife, but we are doing at least one thing, we are temporarily leaving the midwife in abeyance. I mean we are recognizing quite frankly that she exists, but we are not necessarily recognizing that we think she ought always to exist. We ought to concentrate our interest in educating the doctor. If we take away the midwife we have got to give the people something in return. If we give them

Digitized by Google

in return a poor doctor they had better stay with the midwife and our problem is to see to it that if we eliminate the poor midwife or all midwives, we substitute in her place a really well trained obstetrician. Anything this society can do by resolution or other means which will raise the standard of obstetic practice among doctors will be a step in the right direction. I should like to see some such resolution as has been suggested presented.

The Chairman: Will Dr. Adair offer such a resolution?

Dr. Adair: I have no written resolution to present. Perhaps it would have been better to have presented it in written form, but my idea was simply that this society should be the one organization, one national organization, which would father or mother maternal welfare and child welfare and that it should not be split up in different organizations and that we should now attempt to secure the active co-operation of the obstetricians in developing the maternal welfare in conjunction with the infant welfare program and that through the obstetrician we should attempt to reach, as Dr. Smith has said, the poor doctors because I am firmly convinced the poor doctor does more harm than the midwife, especially than the good midwife. Our effort should be along two distinct lines. The midwife is a fact and not a theory. While we attempt to eliminate the poor midwife and ultimately all midwives, we should also attempt to eliminate the poor doctor as well as the poor midwife. I would, therefore, offer a resolution, that this society ask the American Gynecological Society to take more interest among themselves in social problems and attempt to extend and improve the obstetric practice and develop a maternal welfare program throughout the United States.

The Chairman: This resolution has been moved and seconded. Is there any discussion?

A Delegate: May we ask Dr. Adair to present the resolution in writing so that it may be duly referred, according to the custom of the Association, to the Committee on Resolutions.*

The Chairman: Is it the wish of the meeting that the resolution be submitted to the Committee on Resolutions? All those in favor of such action, signify by saying "aye." Those opposed. So ordered.

The Chairman: Miss Stevens, have you anything to add in closing?

Miss Stevens: There is only one point I would like to emphasize because I feel it so very strongly myself and that is that we cannot do anything which will correct the work of the poor doctor and the poor midwife more quickly than to teach the women of the community what good obstetrics really is and why they should demand it.

The Chairman: We will all endorse that. Have you anything to add, Dr. De Normandie? Dr. Champion? If not, the session stands adjourned.

---

* The resolution, which was submitted in the following form to the Committee on Resolutions, was approved by that committee, and was adopted by the Association at the closing business meeting, November 13, 1919:

Resolved, That the American Child Hygiene Association ask the American Gynecological Society to appoint a committee to confer with it and advise in the elaboration and development of a maternal and child welfare program for the United States.

Digitized by Google

INFANT CARE

Dr. Alan Brown, Toronto, *Chairman*
Dr. Richard A. Bolt, Oakland, Cal.
Dr. Helen MacMurchy, Toronto
Dr. Mary Sherwood, Baltimore
Dr. Richard M. Smith, Boston
Dr. Joseph S. Wall, Washington

Digitized by Google

Digitized by Google

REPORT OF BREAST FEEDING BUREAU AT MINNEAPOLIS

J. P. SEDGWICK, M.D., Minneapolis

Stenographic Report of Remarks Made in Explanation of Dr. Sedgwick's Report by Dr. E. J. Huenekens

DR. HUENEKENS: Mr. Chairman, ladies and gentlemen.— This is only a preliminary report of the work that Dr. Sedgwick has been doing for the last year in Minneapolis. His work has been conducted since January first. Later, Dr. Sedgwick intends to get out a more pretentious report. This is just to give you some idea of the work that he is now doing. The idea of this Breast Feeding Investigation Bureau is to reach the mother of every new born baby in Minneapolis. It is the intention after we have reached these mothers, to educate them first as to the value of breast feeding and second, to teach them the means by which they can continue it. Leaflets were got out on the value of breast milk. The first literature was written by Dr. Sedgwick himself, but it was found to be too technical for general lay use so he asked one of the lay workers to prepare something very simple, which has been found better in getting the idea across. These small four page leaflets tell in a few words the value of breast feeding. A copy of the leaflet follows:

CHILDREN'S YEAR AND INFANT MORTALITY.

The twelve-month 1918–19 has been very rightly set aside as Children's year; rightly because, in America, at least, sturdy children have never before been so important a factor in future national soundness. We must be assured of normal citizens to take the place of the splendid men who are going out of the national life in such numbers and who fight to perpetuate a legacy of freedom, not to a puny and effete race, but to a strong, straight thinking, clean living people.

No one questions to-day that the basis of a morbid and perverted maturity is largely laid in the ills — so many of them preventable — of neglected childhood; ills which later become a drain on public resources and a menace to public soundness. The nations are awakening to the realization that a people, in order to continue its old high ideals in internal and international legislation, must look to its future citizens and see that a healthy mind is fostered in a healthy body.

The immediate practical application of that principle this year is the request of the government that we have our children weighed and measured so that any deviation from the normal may be corrected and more intelligent care of the child ensue. A most wise policy, surely, but in preventive medicine there

Digitized by Google

is one far more basic — the prevention of infant mortality. For consider, there might be many more children to be so registered for the government if they had been given the chance nature intended them to have.

From the records of the Minneapolis Board of Health for the year 1916, for example: We find there were 8,778 births for that year. Of those 8,778 babies, 59 did not survive their second week, 65 did not survive their second month, and 724 died in their first year. It has been said that a baby has less chance of reaching its first birthday than a man of 80 has his eighty-first. Looking for some common factor in this large percentage, we find that in the United States according to locality, the death rate is from three to nine times higher among babies who were never nursed, or if nursed, only for a short time. Therefore, "Maternal feeding should be the keystone of the propaganda for the prevention of Infant Mortality."

But, says the public, "Everyone knows that breast milk is best for babies." Yes, but how often have you heard mothers say, "Oh, I couldn't nurse the baby, my milk was just poison for it," or "My milk was such poor quality and I weaned the baby; it wasn't getting enough."

The medical profession is rapidly recognizing five things:

First, that there is no such thing as mother's milk being bad for the baby; any other mixture will disagree just as much and the child will have six times less chance of living.

Second, that the nursing of a healthy baby increases the flow of milk till it is "getting enough," and that until that time a little breast milk, with enough artificial feeding added to make up the proper amount (determined by weighing the baby before and after nursing), will prevent sickness.

Third, that if there is no demand made on the breasts, such as nursing or expressing the milk, the supply will disappear. The fundamental requirement for the stimulation and continuation of the milk flow is the complete and regularly repeated evacuation of the breasts. The pernicious practice of dropping a nursing and replacing it with an artificial feeding is one of the most frequent causes of the breast drying up and the loss of milk. The breast is not thereby stimulated; it is instead, the best method of weaning the infant.

Fourth that in a premature birth, where the baby is not strong enough to nurse, the life of the child is more often saved by feeding it milk expressed from the breasts and, at the same time, by that expressing, the flow is kept up till the baby can nurse naturally later, when it becomes stronger.

Fifth, that lactation can be re-established when the baby has been off the breast for some time. One such case follows:

"A short time ago, an infant, aged four months, was seen which was having convulsions, spasmophilic in character, on unnatural feeding. The child had not had the breast for nine weeks. It had been taken from the breast because of illness of the mother. She had just returned from a contagious hospital, in which she had had severe erysipelas followed by antrum trouble. The mother and baby were immediately taken to a children's hospital where the nurses had been properly trained in milking. The baby's spasmophilia was controlled by proper medication. The mother was assured that with her cooperation the milk could be brought back. The breasts were stimulated regularly by placing the baby

Digitized by Google

at the breast. The baby refused the nipples at first. The milk was carefully and thoroughly expressed and the baby's nutrition was maintained by complemental feeding. For several days, the results were discouraging, as but three or four drops were obtained. The number of drops gradually increased. Then the amount grew so that the product was finally established."

Again, it is known that artificially fed babies are much more subject to contagious diseases than those given a start on breast milk. This applies not only to the months while the baby is actually being nursed, but to all the ensuing years. Breast-fed babies develop more resistance for later life. To quote one of many such cases in the records of the University of Minnesota:

"A mother had four children. The first baby was nursed but a short time because of lack of milk and then weaned entirely. The other three children were wholly at the breast for from 9 to 11 months. The first child has been at the mercy of contagious diseases at school, while the other three have not contracted them, even when in the same surroundings."

The knowledge of the importance of breast-feeding in combating infant mortality is rapidly growing in this country. The Department of Pediatrics of the University of Minnesota has felt the work so important that it has established a Breast-Feeding Investigation Bureau to make a statistical study of the breast-feeding in Minneapolis and to give any information and help necessary both to mothers and physicians.

A new mother receives a great deal of literature from interested concerns anxious to sell their particular product in the interests of artificial feeding. The department of Pediatrics of the University of Minnesota has established a Breast-Feeding Investigation Bureau wholly disinterested in a mercenary way and working through a great Medical School and Board of Health wishes to combat by publishing the increasingly recognized truth of the superiority of breast milk. They urge us to consider that while we must comply with all government requirements in having our older children registered we should ourselves, make a special effort to save the babies that there may be more and healthier children to register in coming years.

The literature is supplemented by personal calls by the nurses and workers of the Bureau, especially in those cases where the mothers are not convinced of its value or have been advised differently by either the first nurse or neighbor. The methods that have been adopted for teaching the maintenance of breast feeding have been very simple. They consist almost entirely in making continuous demands at regular intervals on the breast. In the first place by applying the infant itself. In the cases in which the breast milk is not sufficient, where artificial food must be given, this is done by complementary instead of supplementary feeding, a certain minimum amount given after each nursing and never

Digitized by Google

to replace the nursing. Dr. Sedgwick feels this is very important. One of the most common mistakes is in substituting the bottle for a breast feeding, thus an insufficient demand is made on the breast and the breast milk decreases very rapidly, especially is this true if both breasts are not stimulated at least five times a day. In those cases in which the breast milk is deficient either because the mother herself has not sufficient milk or the baby has not been nursing regularly or vigorously enough or in which the baby is what we call a poor nurser where the response is not properly developed; in these cases we have been sending nurses into the home to show the mother how, after the baby has nursed the breast, the remainder of the breast milk can be expressed by hand, thereby stimulating the breast most efficiently. This is not done by means of a breast pump or the older method of massaging the whole breast, but rather by manipulating the portion near the nipple, in the same way that it is done with the cow. The breast is grasped just back of the areola with thumb and forefinger, and the breast milk expressed. With a little teaching on the part of the nurses, mothers can readily learn how to do this, and it is a much easier and efficient way of expressing the breast. The idea is that if the breast is always thoroughly emptied the breast milk supply will increase. In fact, in mothers who have stopped nursing the babies for weeks, the breast milk can be brought back by this means. In one case that came under my own observation, a mother fed her baby exclusively on breast milk nine months, and during that time the baby was never put to breast on account of breast trouble, but the breast milk supply was kept up nine months by means of this method. This method solves the cracked nipple problem.

Now as to the means of getting at these mothers. The Central Bureau is located at the Pediatric Department, University of Minnesota. Every day the city health department sends a list of new born babies. The mothers are reached within the first three weeks of the baby's life, either by telephone, or by personal call, and the information which is contained on the following card is obtained.

1 Is your baby being breast fed?.....
2 If not, when and why did you stop?.....
3 How many other children have you had?.....

Digitized by Google

4 Give years of births: 1..... 2..... 3..... 4.....
5 How many are living?.....
6 If you have lost any at what ages and from what cause?.....
.....
.....
7 How long was each child at the breast only? (If but a few days or short time, state as nearly as possible the number of days.)
1..... 2..... 3..... 4.....
8 When was the breast stopped in each case?
(1).....mos. (2).....mos. (3).....mos. (4).....mos.
9 Give reason for stopping breast feeding in each case if before the ninth month.
1..... 2..... 3..... 4.....
10 If a bottle was given with the breast when was it begun and was it in addition to each breast feeding or in place of certain breast feedings?
1..... 2..... 3..... 4.....
I can be reached by phone No. .....

This information is obtained in the first three weeks of life. In many cases, especially among those better situated and circumstanced, it is obtained by telephone. In the case of poor people it is obtained through our Infant Welfare Society, by the nurses making these first calls. Then before the new born baby is six or seven weeks old, this second card is mailed to them and very similar information obtained.

(1) Is your baby still breast-fed?.....
(2) How often do you feed it?.....
(3) Does it receive the breast only?.....
(4) Are you having any difficulty nursing the baby?.....
.....
.....
(5) If so, what?.....
(6) If it is not breast-fed, when and why did you stop? (State how long the baby was breast-fed).....
.....
.....
.....
Have you or the baby had Influenza?.....
Have you a telephone?.....

Then, after that each month another card in another form, but very similar, is sent to each mother and if no answer is received by mail, and the mother can not be reached by telephone a nurse is sent to make a personal call and obtain this information. The woman in charge of this

Digitized by Google

work tells me that she received anywhere from fifty to seventy-five per cent of the answers mailed directly to her so that personal calls do not have to be made.

As to the office personnel, there is one woman (with considerable ability) in charge of the work and records, who directs the work of the nurses and other workers. Under her there is one woman on part time who obtains a large part of the information by telephone. That is, her particular part of the work is to get as much information over the telephone as possible. Then we have three nurses aside from that, called "trouble nurses" who are sent in those cases in which the mother is having difficulty in nursing her baby. They are sent out to encourage her as much as possible and urge her to continue the breast feeding, and if necessary to teach her the manual expression of the breast-milk. The remainder of the work is done by the regular nurses of our Infant Welfare Society, which organization has been co-operating very closely with Dr. Sedgwick in this work. The Welfare Society makes first two calls on all babies in the neighborhoods reached by their clinics. In other neighborhoods, even the wealthiest, this work is done by the Breast Feeding Investigation Bureau. The co-operation of the two organizations has greatly helped the breast feeding propaganda. Since these repeated visits to the mother of every new born baby in Minneapolis have been made, the mothers have been reached in better fashion. There was some misunderstanding and difficulty in the beginning in obtaining the cooperation of the physicians, but I think I can say that by this time Dr. Sedgwick has obtained their hearty cooperation. We have no physicians now in Minneapolis actively objecting to this work. If they are luke-warm or do not want this Bureau to be in direct communication with their patients, we send the information cards directly to the physicians, who fill them out and return them to us. Any way to get the information. Another interesting part of this work is that we are receiving suprisingly good cooperation from the medical and religious sects which might be expected to object to giving information at all.

Digitized by Google

PRELIMINARY REPORT

The following is a preliminary report of the work of the Breast Feeding Investigation Bureau.

JANUARY CASES
1919

Six hundred and thirty-six Babies were born in Minneapolis during January, 1919. Of those at the end of each month listed in the following table there were:

	January 31, 1919	February 28, 1919	March 31, 1919	April 30, 1919	May 31, 1919
Breast fed	516	486	427	390	345
Breast fed — complemental*	33	41	61	59	63
Total breast fed	549	527	488	449	408
Artificially fed	.....	8	24	37	48
Total under observation	549	535	512	486	456
Artificially fed from birth	13	13	13	13	13
Pending*	4	5	14	30	41
Baby died	18	21	25	27	28
Mother died	3	3	3	3	3
Refused to give information	.....	3	3	5	5
Moved out of town	.....	5	13	19	33
Cannot be traced	9	11	13	13	17
Out of town cases	40	40	40	40	40
	636	636	636	636	636

Seventy-one Mothers of January Babies were given special attention and taught expression of milk from the breasts in order to stimulate the breasts and thereby increase the milk supply.

On January 31, 1919, we had 549 of the Babies born in January under observation. On May 31, 1919, we had 456 of these Babies still under observation — 93 of the 549 Babies under observation on January 31, 1919, having been dropped for the following reasons:

37 cases	*Pending (Moved but not given up)
10 cases	Baby died
5 cases	Refused to give Information
33 cases	Moved out of Town
8 cases	Cannot be Traced
93	

* By "Complemental" is meant Breast Fed with an addition of some Artificial Mixture after the Breast Feeding.

By "Pending" is meant that the mothers of those children have moved but we have not given them up, as we have reason to believe that they can be found later.

Digitized by Google

RESULT:

408 (89+%) of the 456 January Babies still under observation on May 31, 1919, were on the Breast—leaving 10+% of those Babies on Artificial Food.

449 (92+%) of the 486 January Babies still under observation on April 30, 1919, were on the Breast—leaving 7+% of those Babies on Artificial Food.

488 (95+%) of the 513 January Babies still under observation on March 31, 1919, were on the Breast—leaving 4+% of those Babies on Artificial Food.

527 (98+%) of the 535 January Babies still under observation on February 28, 1919, were on the Breast — leaving 1+% of those Babies on Artificial Food.

February Cases
1919

Six hundred and twenty-one Babies were born in Minneapolis during February, 1919.

Of those at the end of each month listed in the following table there were:

	February 28, 1919	March 31, 1919	April 30, 1919	May 31, 1919
Breast fed	520	493	418	352
Breast fed — complemental*	31	46	61	63
Total breast fed	551	539	479	415
Artificially fed	.....	4	21	37
Total under observation	551	543	500	452
Artificially fed from birth	11	11	11	11
Pending*	2	5	26	66
Baby died	19	21	22	23
Mother died	1	1	2	2
Refused to give information	.....	.....	1	1
Moved out of town	.....	3	18	24
Cannot be traced	3	3	7	8
Out of town cases	34	34	34	34
	621	621	621	621

Forty-three Mothers of February Babies were given special attention and taught expression of milk from the breasts in order to stimulate the breasts and thereby increase the milk supply.

On February 28, 1919, we had 551 of the Babies born in February under observation. On May 31, 1919, we had 452 of these Babies still under observation — 99 of the 551 Babies under observation on February 28, 1919, having been dropped for the following reasons:

64 cases *Pending (Moved but not given up)
4 cases Baby died
1 case Mother died
1 case Refused to give Information
24 cases Moved out of Town
5 cases Cannot be Traced

99

* See page 95.

Digitized by Google

RESULT:

415 (91+%) of the 452 February Babies still under observation on May 31, 1919, were on the Breast — leaving 8+% of those Babies on Artificial Food.

479 (95+%) of the 500 February Babies still under observation on April 30, 1919, were on the Breast — leaving 4+% of those Babies on Artificial Food.

539 (99+%) of the 543 February Babies still under observation on March 31, 1919, were on the Breast — leaving ¼% of those Babies on Artificial Food.

March Cases

1919

Seven hundred and ninety Babies born in Minneapolis during March, 1919. Of those at the end of each month listed in the following table there were:

	March 31, 1919	April 30, 1919	May 31, 1919
Breast fed	615	543	445
Breast fed — complemental*	30	44	57
Total breast fed	645	587	502
Artificially fed	.....	20	39
Total under observation	645	607	541
Artificially fed from birth	22	22	22
Pending*	36	52	107
Baby died	17	27	28
Mother died	5	5	5
Refused to give information	1	1	1
Moved out of town	.....	12	20
Cannot be traced	10	10	12
Out of town cases	63	63	63
	799	799	799

Forty-one Mothers of March Babies were given special attention and taught expression of milk from the breasts in order to stimulate the breasts and thereby increase the milk supply.

On March 31, 1919, we had 645 of the Babies born in March under observation.

On May 31, 1919, we had 541 of these Babies still under observation — 104 of the 645 Babies under observation on March 31, 1919, having been dropped for the following reasons:

71 cases *Pending (Moved but not given up)
11 cases Baby died.
20 cases Moved out of Town
2 cases Cannot be Traced

104

* See page 95.

Digitized by Google

RESULT:

502 (92+%) of the 541 March Babies still under observation on May 31, 1919, were on the Breast — leaving 7+% of those Babies on Artificial Food.

587 (96+%) of the 607 March Babies still under observation on April 30, 1919, were on the Breast — leaving 3+% of those Babies on Artificial Food.

April Cases

1919

Seven hundred and nineteen Babies were born in Minneapolis during April, 1919. Of those at the end of each month listed in the following table there were:

	April 30, 1919	May 31, 1919
Breast fed	590	552
Breast fed — complemental*	19	30
Total breast fed	609	582
Artificially fed	.....	8
Total under observation	609	590
Artificially fed from birth	7	7
Pending*	29	37
Baby died	19	22
Mother died	1	1
Refused to give information	.....	1
Moved out of town	1	7
Cannot be traced	.....	1
Out of town cases	53	53
	719	719

Fourteen Mothers of April Babies were given special attention and taught expression of milk from the breasts in order to stimulate the breasts and thereby increase the milk supply.

On April 30, 1919, we had 609 of the Babies born in April under observation.

On May 31, 1919, we had 590 of these Babies still under observation — 19 of the 609 Babies under observation on April 30, 1919, having been dropped for the following reasons:

8 cases *Pending (Moved but not given up)
3 cases Baby died
1 case Refused to give Information
6 cases Moved out of Town
1 case Cannot be Traced

19

RESULT:

582 (98+%) of the 590 April Babies still under observation on May 31, 1919, were on the Breast — leaving 1+% on Artificial Food.

* See page 95.

Digitized by Google

MAY CASES
1919

Six hundred and fifty-seven Babies were born in Minneapolis during May, 1919. Of those at the end of each month listed in the following table there were:

	May 31, 1919
Breast fed	506
Breast fed — complemental*	32
Total breast fed	538
Total under observation	538
Artificially fed from birth	11
Pending*	27
Baby died	17
Mother died	2
Refused to give information	.....
Moved out of town	3
Cannot be traced	7
Out of town patients	52
	657

Five Mothers of May Babies were given special attention and taught expression of milk from the breasts in order to stimulate the breasts and thereby increase the milk supply.

These figures look almost too good to be true, but I can assure you that they are true. Eighty-nine plus per cent of the 456 January babies still under observation on May 31, 1919, were still on the breast, leaving ten per cent of these babies on artificial food. That is, when these babies were between four and five months old there were still eighty-nine per cent on the breast. Ninety-two plus per cent of the 486 January babies, still under observation on April 30th were on the breast; leaving seven per cent on artificial food. When they were three months old only seven per cent had been weaned. Ninety-five plus per cent of the babies three months old were still on the breast, leaving four per cent that had been weaned, and 527 or ninety-eight plus per cent of the January babies under observation were still on the breast on February 28th. That is when they were between one and two months of age, leaving only a little over one per cent of these babies on artificial food. So that ninety-eight per cent of the babies after one to two months were still on the breast, and these were practically all the babies born in Minneapolis during January, 1919. This work, Dr. Sedgwick intends to continue for one year, and report in full upon the

* See page 95.

Digitized by Google

results. During this coming year this work will be taken over and continued by our Infant Welfare Society as part of its regular work. The Infant Welfare Society is very glad indeed to get the opportunity to do this work as one of the most effective means we have of saving babies, is by continuing them on the breast. In the past we have had the experience that these babies are not brought to the infant welfare clinics until after being weaned; by this means we will be able to get them before they are weaned. Among other things the nurses who visit in the homes always leave one of the pamphlets telling them about the infant welfare clinics, where the stations are, and that the mothers are welcome to bring the babies to them. What I have been giving you is only a mere outline, and I do not know the details of the work as well as Dr. Sedgwick does, but I will be glad later to answer any questions any of you wish to ask about it.

DISCUSSION

The Chairman: Dr. Richard M. Smith, of Boston, has kindly consented to open the discussion.

Dr. Smith, Boston: It seems to me that Dr. Sedgwick has rendered very great service to the general cause of child welfare in emphasizing and focusing our attention on the value of breast feeding. It was not so very long ago that when anyone arose to discuss the question of infant feeding, or when the question of infant feeding was raised in any connection, everyone thought of artificial feeding. We have begun to realize that infant feeding begins at the time the child is born. Many of the problems of feeding have to do with the child still on the breast. I think it is very much worth while that Dr. Sedgwick should have undertaken this thing which Dr. Huenekens very definitely said, is breast feeding propaganda. We in this country and elsewhere need constantly to have it brought to our attention that the proper way to feed babies is to keep them on the breast. Anything that can be done to emphasize the importance of breast feeding is very much worth while. Of course many other parts of the country have been interested in this problem. Most of the work in other cities has been done in connection with the Infant Welfare stations and I think that probably we shall hear from welfare associations concerning breast feeding problems in their various stations. The question of breast feeding is one to which we have previously given very little actual study. We have studied the difficult case of feeding on artificial food, but we have not given enough thought and enough attention to the difficult cases of breast feeding. Unless my experience is very different from your experience not all babies on the breast do equally well. We have given very little thought to the study of these babies. For the most part after various attempts at breast feeding, it has been said the milk does not agree or some other reason found and the baby has been weaned.

I believe if we would give the same amount of thought and attention and study to the difficult cases of breast feeding we should make a very real contribution to infant nutrition, as well as to the general question of infant mortality.

There are two or three things that interest us with reference to breast feeding,

Digitized by Google

I asked some of the obstetricians in Boston recently what means they employed to stimulate the production of breast milk or what ideas they had concerning it, and what should be done to insure a satisfactory milk supply. With almost unanimous voice they had very little to offer in a constructive way that should help the pediatrician in breast feeding. The most of them believe that a certain amount of fluid should be given and that too much fluid is sometimes given. They believe in ordinary, reasonable exercise and fresh air. They do not believe that drugs do any good. They are not in favor in, in general, of mechanical means of emptying the breast and that is about all there is to be said. In other words, there is very little that is constructive to be said with reference to the actual care of the mother or modifications of her diet or life which bears on the problem of difficult cases of breast feeding. Those are the cases we must study. Personally I feel that we have very little definite information. The thing Dr. Sedgwick has been emphasizing a good deal in the last year is the necessity for actually emptying the breast. Mechanical emptying of the breast by manipulation is one of the most satisfactory means of emptying the breast and undoubtedly has an influence in increasing the supply and quantity and probably has a good deal of influence in maintaining the supply in certain cases, but that is not the entire solution of the problem of breast feeding. We need very much to know why it is that some babies that are on the breast have constant colic, if you wish to call it that, have obvious evidence of discomfort. They spit up and changing the intervals between feedings or the diet does not always straighten them out. In other words these cases are not doing well. If they were on the bottle we would say without question that the child is not being fed properly. They are on the breast, but whatever the matter is, I am not able to say, and that is one of the questions that pediatricians have got to tackle if we are going to be able to bring up one hundred per cent of the babies on the breast. I think the attitude of mothers, the psychological attitude has a great deal to do with the situation. Without doubt women who want to nurse their babies do very much better than those doing it under protest. Not very many years ago there was a great deal of feeling among well-to-do people that breast feeding was not desirable. That attitude has changed entirely, and most women want to nurse their babies. The only reason women do not want to nurse their babies, so far as I can discover, except in very rare instances, is that it takes too much time. It is a selfish reason and the percentage of selfish mothers is very small. But among the mothers who really want to nurse their babies there are some whose babies do not do well. Breast milk analysis has thus far not given very much help in these cases. It may not be the difference in composition of fats or proteids or salts, it may be due to something else. It may have to do with the reaction. We know there is trouble when the reaction in cow's milk is too acid. Certainly it is not always the question of quantity. It has something to do with the quality. If we can be assured that all of the babies who are kept on the breast will do well, and that every baby is given a chance at the breast, our problems of infant feeding and our problems of infant mortality will be very greatly solved.

The Chairman: This is an intensely interesting and important subject especially from the pediatrician's standpoint. Whenever I come in contact with a mother who has difficulty in nursing her baby, which frequently occurs, I distinctly recall an experience we had in our children's hospital in Toronto where we had one wet nurse

Digitized by Google

who consistently gave for seven months, 119 ounces per day, nursing every day on an average of nine infants. She commenced by nursing one infant, then two, three and so on so that the more infants that were added to her duties, the greater her supply became.

The meeting is now open for discussion.

Dr. H. L. K. Shaw, Albany: A large proportion of the mortality in the first week of life is due to that same ignorance and I think we should emphasize this subject in our medical schools and impress upon the medical student the great importance of breast feeding. The cases of malnutrition and digestive disorders that come to my office nearly all give a history of having been taken away from the breast on the advice of the doctor, nurse or friend, when I feel very sure that under a few simple rules and directions many babies could remain longer on the breast and be spared much suffering and discomfort. There are obstetricians who to this day advise the mother very early to wean the baby and put it on a bottle. A man may be a good obstetrician, but not necessarily a good pediatrician, and I feel we should make better pediatricians of the obstetricians as they are the ones who should be taught the great importance of keeping the baby on the breast so that if anything goes wrong the mother can be assisted and lactation prolonged.

The Chairman: Another very important point that was brought out in Dr. Hueneken's paper was the fact that they were able to keep up the supply of breast milk better by the use of supplemental feedings. That, I feel reasonably certain is the proper procedure. Three years ago we conducted a series of observations in our child welfare clinics in which we advocated that method, and our latest figures show that the percentage of infants kept on the breast has certainly increased. In our experience, at least, the supplemental feeding has proved more beneficial than alternating one feeding with the other.

Miss Winifred Rand, Supervisor, Baby Hygiene Association, Boston: I am interested to corroborate the statement just made of the need of early education to stimulate the interest in breast feeding. We made a study lately of the babies under six months of age who were under our observation in Boston and found that we had 1,245 under six months of age and that only 167 of these were bottle fed. We found that over half of those 167 who were bottle fed were put on the bottle before they came to us. That is, within the first week or first three weeks of life they had been for some reason or other put on the bottle and it seems to me that that indicated the need of further education by those who are caring for the mother and baby at the very beginning of the baby's life. They come to us too late for an infant welfare society to do as much for them as should be done, because they come to us in greater numbers after they are a month old. The mother is hardly able to come to the infant welfare station until the baby is a month or so old and already they have been put on a bottle. We have been interested to try Dr. Sedgwick's method of stimulating breast milk by complete emptying and by the manipulation as it was described, and have had interesting results, although we have only been able to try it for a few months.

Dr. F. L. Adair, Minneapolis: The obstetricians have come in for a few criticsms on this subject. So I should like to say a few words. Firstly, I am convinced from my work in the Minneapolis hospital that 99 per cent of the women can nurse their

Digitized by Google

babies on the breast during the period of their life when the obstetrician does have and perhaps must have more or less to do with the baby. I am also convinced that the use of the bottle with the rubber nipple early in life, even for the administration of water, is responsible for a certain amount of the difficulties with breast feeding. While I believe particularly in the administration of water in the first few days, I believe it is better to administer it in some other way than through rubber nipples. Secondly, I am firmly convinced there is nothing that is more conducive to abandonment of breast feeding than sore or painful nipples, and I am quite sure there is nothing more productive of sore nipples than prolonged nursing on the breast in the early days of the infant's life. It is a good deal of a struggle to combat this with the nurses and with the mothers, but I am quite sure that up until the time when the milk comes into the breast that it is better to allow the baby to nurse on the breast for a very short period of time, say about five minutes. Then when the milk begins to come into the breasts not to lengthen the interval immediately, but to gradually increase the length of time the baby nurses on the breast. I am equally sure that many of the difficulties in the baby result, you might say, from sudden overdoses of maternal milk at this period of lactation.

Dr. H. J. Gerstenberger, Cleveland: Mr. Chairman, I am sorry I came in too late to hear Dr. Huenekens read Dr. Sedgwick's paper, but I wish to say that I do not think it fair to give the impression that we are just now beginning to appreciate the value of breast nursing. It has been appreciated in parts of this country for fifteen years and abroad ever since Budin started his work in 1890, that the most important factor, in the causation of high infant mortality is the absence of adequate breast nursing and the most efficient means for reducing mortality is the institution of breast nursing and the continuation of the same. I thought from one of Dr. Smith's remarks that this idea was something brand new, but it really has been appreciated in many places for a good long time. However, every scheme inaugurated to increase the production of milk from a mother's breast is to be commended. The ideas at the bottom of the technique of Dr. Sedgwick's plan, I believe, can be found in the writings of Czerny.

Dr. Frances Sage Bradley, the Children's Bureau, Washington: In our rural work we have found a marked difference in the length of time the country woman nurses her baby and the length of time the city woman nurses hers. The city woman often goes dry in three or four months. The country woman on the other hand nurses her baby from one to two years and often three, thus going to the other extreme. In trying to find out why this difference existed we found the country woman to be a hard working person, often poor and eating coarse and poorly cooked food, food which the city woman could not digest. She is however placid and serene and is a good milk giver.

It is a well known fact that in the lower animals lactation is seriously hampered by mental and nervous strain and it is probable that the more highly organized human mother is even more susceptible to this disturbing element. It would be interesting to know to what an extent the high tension life of the city woman is responsible for her limited ability to nurse her child, and it is suggested that a social worker placed on the case might solve the problem.

Digitized by Google

Dr. S. McHamill, Philadelphia: I think Dr. Gerstenberger misunderstood Dr. Smith. I thought he referred to our lack of knowledge of the difficult problems in breast feeding and implied that the subject of breast feeding had not been given full consideration by the medical profession. In that connection it seems to me there is one factor which has not been touched upon that is worthy of consideration. All of us who are pediatricians have sometimes seen twins, one of which would take and thrive upon the mother's milk whereas the other would suffer just as we see individual cases suffer. In such cases we must conclude that one has a tolerance for normal milk, or perhaps a tolerance for an abnormal milk, and the other has not. This tolerance is not always difficult of correction. These children can be made to develop tolerance for maternal milk by feeding moderate quantities and gradually increasing the quantity giving supplemental feedings pending the time that a sufficient amount of breast milk can be taken. The point I wish to stress is that at times we have to consider the child rather than the milk supply.

Dr. T. B. Cooley, Detroit: It is a matter of common observation that the woman who expects to nurse her baby is much more likely to make a success of it than the woman who has had, before the baby was born or perhaps shortly thereafter the idea that she probably would not be able to nurse it and the anticipation of putting it on the bottle. I think also that those of us who have been on the Continent during war times when artificial food was scarce, have been struck with the remarkable success of breast feeding, even when it was difficult to feed the mother adequately, and the mothers consequently had little other anticipation than the necessity of keeping the babies on her breast. These things seem to me to suggest that a good deal of the question of breast feeding is a question of prenatal work as well as work after the baby was born. The prenatal worker in the dispensary or in the home is the one who ought to prepare the mother for the possibility and desirability of keeping the baby on the breast, and that ought to have a psychological result in the mother, which will help a good deal in keeping up the breast feeding.

Dr. John A. Foote, Washington: I am going to say something about ancient history a little later, but I cannot help remarking now that it is recognized that in very ancient times there were certain conditions in the mother during the first few days and within the first week or so after the birth of the child, which unfitted her milk sometimes for use by the infant. It may have been that there were more maternal hemorrhages and more infections in those days, but the fact remains that civilized woman often finds labor, the first labor, a great ordeal and that her mental condition as well as physical condition is sometimes disturbed for a considerable period after. There are certain changes in the milk which may not be chemical, but biological which make it unfit for use by the infant.

It is interesting to note in the sacred book of Indian medicines, written in the 8th century, that in no case was a mother allowed to nurse a child. The mother's breast was emptied artificially and the baby was fed from the breast of another woman showing that these primitive people in their groping diagnosed a certain fact, obvious enough — that there may be certain conditions in the infant in the beginning of lactation which induce physicians and others to discontinue nursing — though perhaps for not any good reason.

The Chairman: I think we are all agreed that this is an old subject, but

Digitized by Google

nevertheless the fact of its being old doesn't mean that it has been settled, and so far there has been no established plan to assure the nursing of the infant. We are extremely grateful to Dr. Huenekens and Dr. Sedgwick for the suggestion of such a practical plan, the main feature being that they are able to get into contact with the infant within the first two or three weeks of life. Dr. Huenekens, have you anything further to add?

Dr. Huenekens: Dr. Gerstenberger was not here for the paper. I do not think Dr. Sedgwick intends to maintain there is anything new in emphasizing the value of breast feeding, but there are two new features about Dr. Sedgwick's plan and one is that by means of this bureau he reaches every baby born in Minneapolis whether rich or poor. That is probably the most important thing about this propaganda. The second is the emphasis on the fact that it is the demand on the breast which stimulates the supply of milk. I think that point is proved, i. e., that the greater the demand that is made on the breast, the greater is going to be the supply. In fact, that is something well known among dairy men. If the better cattle are not milked by counter milkers and the supply taken out, the supply goes down very rapidly. Also, I understand that one of the objections to the use of the milk machine, especially with the better cattle is that it does not get all of the milk from the cow, and, therefore, the supply decreases very much, which is along the same line. We can apply those lessons to the human being.

As to babies with colic — those with whom the breast milk does not agree, I think with Dr. Hamill that in most of these cases it is not a question of there being anything wrong with the breast milk, but that something is wrong with that particular baby. In most cases, that can be proved by exchanging and putting such a baby to a wet nurse and finding that the same condition applies, that it is not the breast milk but an inability of the baby to take care of breast milk in general, and I firmly believe in most instances where we have a nervous baby and mother that this is the case. Most of these cases are neuropathic in origin. As to the expression of breast milk, I have had quite a bit of experience with that in private practice and I think there is one feature that I have not emphasized enough. It is that you have to be very persistent in showing the mother how it is done and giving her the courage to keep it up when she would be inclined to drop it. When we do this in our infant welfare clinics we have a mother come back to every clinic until she is firmly convinced that it is of value. They come back almost invariably the first time and have stopped it because they have become discouraged and some neighbor has advised them that it doesn't amount to very much anyway.

The Chairman: The next paper on the program, "How may the general practitioner be interested in the modern socio-medical program for infancy," by Dr. Bolt will be presented by title only, as Dr. Bolt, unfortunately, is unable to be present. Dr Joseph S. Wall of Washington will discuss the subject.

Dr. Wall: Mr. Chairman, Ladies and Gentlemen: The war has taught us to accept with the best grace we can a good many substitutes, I am afraid we will have to exercise the same spirit of self-sacrifice this afternoon, because what I am going to present is not Dr. Bolt's paper, which has been delayed in the mails, but merely a synopsis of the discussion which Dr. Brown has asked me to give as a basis for discussion from the floor.

Digitized by Google

HOW MAY THE GENERAL PRACTITIONER BE INTERESTED IN THE MODERN SOCIO-MEDICAL PROGRAM FOR INFANCY?

RICHARD A. BOLT, M. D., Gr. P. H.

Director, The Public Health Center of Alameda County, Oakland, California

How may the general practitioner be interested in the modern socio-medical program for infancy? The answer is easy. By catching the general practitioner while he is still young. As a plastic medical student he should be introduced to carefully coordinated courses in the curriculum which form an integral part of a comprehensive scheme for child welfare. While this is not quite so difficult as harking back to our grandparents, as proposed by Oliver Wendell Holmes, in order to produce a superior race, it is sufficiently beset with obstacles to challenge our best endeavors. It is a subject which must still be handled with gloves — but with boxing rather than with "kid" gloves.

I.

It is necessary first to create in a community an atmosphere which demands fair play for the infant and stimulates ample provisions for its normal upbringing. Each community must work out for itself a program for child welfare which best suits its local needs, keeping in view, however, the basic standards for such work. In many localities voluntary organizations and philanthropic societies, with a stimulus from such national organizations as the Children's Bureau and the American Child Hygiene Association, have set up infant welfare work which has opened the eyes of general practitioners. In some places infant welfare has been introduced with fear and trembling, meeting at every turn the passive resistance of the general practitioner. Many a timid soul has really felt that his "private practice was being encroached upon." On the other hand, where general practitioners have been more open-minded they have linked themselves with the larger socio-medical program of the community and have found to

Digitized by Google

their surprise that it widened their influence and enlarged their practice. In this, as in many another concern, the Great War has broadened our horizon and led us to think in terms of community rather than of self. Closer social contacts, the growth of the cooperative effort and work in a common cause have led many medical men to look upon their practice as a social service rather than as a source of purely personal gain. This then is the first essential, a community must seek out its public-spirited general practitioners and enlist them in the cause of child welfare.

II.

Too much stress cannot be laid upon the necessity for the proper education of the medical student in his relation to child welfare. During the latter years of his medical course he should be brought into intimate contact with organizations in the community working for modern child welfare. He should, moreover, be given some responsibility in a child welfare center under the guidance of one with considerable socio-medical experience. Pediatric courses may easily be coordinated with such work. This is becoming increasingly easier as infant welfare centers integrate themselves with Health Centers, the whole offering unusual opportunities in our large medical centers for the instruction of medical students. The importance of this type of education is too obvious to need expansion here. It has already been fully discussed in two previous papers entitled, "The Education of the Medical Student in Relation to Child Welfare" and "The Development of Infant Welfare Centers."

III.

In order to give the medical student the fullest possible opportunity of developing his ideas along child welfare lines, those institutions in the community which contribute most to the welfare of the child must be strengthened and coordinated with his medical work in such a manner as to inspire him to seek knowledge of the most advanced methods of dealing with infants and older children. In communities where there already exists progressive medical education it will not be difficult to establish working relations between the pediatric department and child welfare organizations. As Health Centers develop it

Digitized by Google

should become easy to interest even the general practitioners. In the country districts it will be much more difficult to establish such relations, but even there it is possible to extend infant welfare by establishing district Health Centers and employing health visitors to carry the gospel of infant hygiene into country homes.

IV.

In the development of the infant welfare work it is well for those organizations interested in children to find out the physicians particularly skilled in handling children and who are willing and open to care for them. Opportunity to work in infant welfare centers may then be extended to them. Postgraduate courses may well be planned in connection with Babies' Dispensaries or Hospitals, and general practitioners encouraged to take advantage of them. A community itself must be educated to demand better care for its children. When the general practitioner sees that the people of his community demand more expert skill for their children, and expect of him a broader socio-medical outlook he will take steps to learn how to use all of the facilities of the community for child betterment.

V.

It would be a good idea for some central agency, such as a Welfare Federation, a Child Hygiene Association or the Medical Society itself to see that the physicians of the community are kept in touch with the national organizations for child welfare and are supplied with the publications of such organizations. Publications will be sent free by a number of the national organizations, such as the United States Public Health Service, The Children's Bureau of the Department of labor, the Department of Education, and others. General practioners should become acquainted with the Standards of Child Welfare recently published by the Children's Bureau. In arranging a program for the year the local medical society would do well to make provision for papers on infant care and child welfare. Is it not possible for a Committee of the American Child Hygiene Association to outline a postgraduate course in Child Welfare and assist in standardizing such work. The general practitioner must be urged to join some national organization dealing with child welfare.

Digitized by Google

VI.

We are now entering a phase in child welfare work when cities and counties might do much to stimulate general practitioners to more interest in infancy. In establishing Bureaus of Child Hygiene and by extending the services of health visitors, co-operation may be established with all those working for the good of the infant. An important phase of this work is a more strict enforcement of birth registration. By making a study of the causes of so-called stillbirths and deaths in the early days of life, city departments of health would be in a position to point out where much of the failure in infant welfare effort lies. The public as well as the physicians should be enlightened on this important matter.

Can the general practitioner be interested in the modern socio-medical program for infancy? Most decidedly, Yes — by

1. Reorganization of our general educational program to *inspire* the general practitioner with socio-medical ideals.

2. Reorganization of the medical curriculum in its pediatric and child welfare work so that we may *lead* the general practitioner into line with the best infant welfare work.

3. Organization of the community child welfare groups to *push* the general practitioner into line.

4. Organization of our Federal, State and Municipal public health endeavors to *pull* the general practitioner into line with modern socio-medical child welfare work.

Digitized by Google

HOW MAY THE GENERAL PRACTITIONER BE INTERESTED IN THE MODERN SOCIO-MEDICAL PROGRAM FOR INFANCY?

JOSEPH S. WALL, M. D.,

Washington, D. C.

I do not believe the premise would be considered false, that before the interest of the general practitioner in a socio-medical program for infancy can be evoked, his interest in the basic substantive part of the descriptive adjective must be assured; to-wit — the purely medical program for infant welfare.

If this be accomplished, the transition toward that broadened interest which we speak of as being possessed by the "socially-minded" individual may take place progressively, so that the end result of the topic under discussion will be obtained by a process of natural evolution.

Moreover, such an evolution possesses the great advantage of making possible the utilization in any social program of one already competent because of his interest in the medical side of infancy.

It has often been observed that the best "conference doctor" in welfare work is the young married physician with children of his own whose interest in child welfare is consequently spontaneous.

It would seem that efforts toward making better pediatrists are as much to be desired in an infant program, as the making of better obstetricians deserves prominence in prenatal matters.

Concerning methods of procedure to accomplish this desideratum we may take encouragement from certain successful ways and means which have tended toward the acquisition of better pediatric knowledge on the part of the general practitioner.

Infantile disaster is still largely the result of improper feeding during the first year of life. So apparent is this, that the emphasizing of maternal nursing and proper artificial feeding, when inevitable, forms the bulk of the educational teachings of our welfare centers.

Infant feeding in former years has been a "terra incognita" to many good general practitioners because of the intricacies of so-called feeding methods, some of which required a knowledge of algebra and higher mathematics because of their elaborateness.

Simple and intelligible methods of feeding the bottle-infant will do much toward stimulating the interest of the average doctor in the infant

Digitized by Google

under one year and in securing for this infant during this period more or less periodical supervision. The doctor who "knows how" will include in his ministrations the feeding baby; the doctor who does NOT know how will tell the mother to buy a proprietary food and follow the directions on the label.

This thought appears to me to lead to another important point in the interest propaganda, namely — that it should be the effort of this Association and of all organizations interested in infant welfare to record their disapproval of, and to stamp as irrational, unethical and vicious, the exhibition on the containers of proprietary foods and milk substitutes of so-called formulas for the group feeding of tender infants. It seems to me equally reprehensible that ethical medical journals, including the Journal of the American Medical Association, should carry in their advertising columns the seductive appeals of these various infant-foods while professing abhorrence in other columns of the use of proprietary medicines, the administration of which to the bodies of adults possesses not a hundredth part of the everlasting harm inflicted upon the young by the feeding of patent foods.

The curbing of this hypocrisy through pressure of opinion of this and kindred organizations would accomplish much.

From the Middle West, under the leadership of some who have been prominent in this Association, have come principles of artificial feeding so simple and so potent for good, that the average practitioner need no longer live in ignorance, nor cloak his ignorance by passing on his responsibility to the manufacturer of a sugar or a barley flour.

An enormous stride toward the goal of the program would be accomplished if the average doctor would be brought to realize the need of continuous supervision of the well baby during its first year. This, one might call the "Baby's Life Extension Institute," a term now applied to a method of supervision during adult life and one which is gaining an increasing measure of popular support. But how vast are the possibilities of the Infant's Life Extension Institute as compared to that of the mature?

There is no reason why the average practitioner, who is always an obstetrician and pediatrist as well, should not conduct a well-baby clinic in his private work as an integral part of his practice. There is no reason why he should deny the new-born child that measure of medical supervision which to a greater or less degree he accords the

Digitized by Google

mother during the nine months preceding the birth of the infant. The goal of good obstetrics should be not only the delivery of the living child but that the child should continue to possess the attribute of living.

Prenatal care by the average practitioner, even if many times indifferent and inefficient, is recognized by him as an inherent right of the expectant mother. Equally rightful is the prerogative of the infant during its precarious first year to have its share of medical supervision.

The socially-minded individual is largely so through instinct. Like poets, and to be more concrete, like the successful Public Health nurse, they are born and but rarely made. Yet the dormant and potential social instinct may be awakened into a dynamic force through stimulation and cultivation.

First and foremost should be the implantation of modern social responsibility in the minds of physicians in the making. At no distant time the well-baby clinic will be considered an essential unit in every complete course in medical education.

The actual laboratory training of the medical student in the prevention of infant disease and death should be held equally paramount with the desire to teach him curative measures which only too often prove to be futile in application when the methods of prevention of disease have been ignored. The preachment of reconstruction should not outbalance the teaching of means to avert destruction of infant life and health.

Attendance upon the well-baby laboratory should not be optional nor desultory, but obligatory, in that it should be granted its due measure of clinical credits in a 4,000-hour course.

When one realizes that the greater number of our conference physicians are young men but recently graduated, what an unlimited reserve of competent workers would be available in whom one would find not only interest and inclination toward socio-medical matters, but who would possess competence to immediately undertake such duties.

As to the physicians already in practice.

If the practitioner's interest in child work is assured from natural inclination or has become more keen, perhaps by reason of the operation of the measures heretofore enumerated, his active participation in a social program should not be difficult to secure.

Publicity of aims of such a program should be assured through active propaganda and frequent reiteration — lest we forget.

Digitized by Google

Personal touch through invitations to attend working welfare centers we have found productive of much good. The aftermath of a baby week weight and measurement test, as demonstrated during the Children's Year, frequently reslts in the acquisition of valuable men and women who have become interested often by their actual participation in welfare matters as temporary volunteers.

During this convention we shall hear with interest the results that have been obtained by the Minnesota Plan of a mobile health center which should reach not only the mothers and children of a rural community but the general practitioner as well.

The North Carolina experiment under Dr. Rankin inaugurated a system of post-graduate instruction especially designed to meet the needs of the general practitioner who could not leave home. The end results of this plan should now be capable of evaluation and if profitable and practicable its adoption by other states should be urged in the interests of the program under discussion.

The frequent presentation of symposiums on infant welfare before medical societies is especially to be commended. Tactful assignment of part of the program to potential but socially inactive obstetricians and pediatrists will not infrequently elicit their earnest support in the socio-medical activities of a community.

After quitting the halls of his alma mater, there is but one matter to whose dictates the average practitioner pays respect and obedience, even if at times grudgingly. The state and city departments of health can officially conduct a continuous propaganda which will bear the prestige and authority of a legally constituted body. Should such an organization embrace a separate Bureau or Division of Child Hygiene, it possesses an additional factor of immense importance in reaching the practicing physician for under the leadership of capable chiefs, such divisions are radiant centers of eager enthusiasm.

It is probable that some of the far-reaching effects of the propaganda conducted by Dr. Shaw of the State Department of Health of New York, were in no small measure due to the education of the physicians of that state as well as the laity. Simplified, readable bulletins, constructed to appeal to the lay reader, will carry their messages none the less effectively because of their simplicity to the average practitioner who may find many of the columns of medical literature beyond his ken.

Digitized by Google

There is in the minds of many of us the fixed idea that eventually the socio-medical program for infancy will by right be assumed by the state; that physical education of the child will not await the age of six before receiving, and none too willingly, its share of recognition in relation to cultural education.

Pending the consummation of this ideal of the right of every infant to receive from the state physical as well as mental training, there is need of a constant campaign of recruiting to preserve the ranks of the "socio-medical" individuals who must of necessity carry on the program for child betterment in the present day.

DISCUSSION

The Chairman: The whole question of the education of the general practitioner, or probably more strictly speaking, the student before he comes to be a general practitioner, is now open for discussion and we ought to hear from a number of men representing their respective universities concerning the plans they have in mind and the plans already in working order. I might say that we are all aware of the fact that probably one of the greatest stumbling blocks we have in the conduct of all public welfare work is the general practitioner. Therefore, if the student is educated while still in the medical school, in this large subject of infant and child welfare it is not going to be so difficult to bring the subject before him when he enters practice. I hope, therefore, we will have a very general discussion on this important subject, so that we may be able to develop some definite lines for procedure.

Miss Minnie H. Ahrens, Chicago: I would like to ask for information as to how we can do more than reach the student at present in our medical schools. We all grant that further preparation is needed by this group of men, and we look forward to this group of men coming out to help us, but what about the thousands of men who are out now? That is what the public health nurse is facing today in her program. She is being educated in the centers where good infant welfare work is being done by good men. She is being sent out into the rural communities and small villages and expects when she goes out there to do something in promoting and helping the infant welfare work. She finds when she gets there that her hands are absolutely tied because she has no one in the town who is ready to help her or who even knows anything about it. Is there not something we can do to help the men who are already in the field? And that means the general practitioner.

Dr. Fritz B. Talbot, Boston: Mr. Chairman, this subject, of course, is vitally interesting and I might outline a little bit what I think ought to be done although I think it is being done in very few places. The last speaker said that the country practitioner did not know how to help. That is perfectly true. They have not had the necessary type of education, neither have they the time nor the interest to undertake such work, but they may be helped in the schools where so many of them are coming back for courses in pediatrics. A little is being done every now

Digitized by Google

and then with the students who are coming back for post-graduate work in pediatrics. Now, in regard to the undergraduate teaching — if we look at any problem, we must look at it from the long distance point of view. These general practitioners out in the country are not going to be there always, and it is going to be very difficult for them to change habits of a life-time, whereas if the habit is instilled in the student of thinking from the social point of view, that habit ought to last a life-time, and it is the student that needs the education. But before the student can be educated we have to get the interest of the student body and we have to get the interest of the teachers and the faculty. Plans are already on foot to institute such preventive teaching in some medical schools.

Dr. A. O. Peters, Dayton: We have begun to approach this problem in our community by an annual medical Chautauqua. Out district medical society is composed of the physicians of eight counties. This year for the second time we conducted a meeting lasting an entire week, one day of which was given over entirely to the discussion of problems touching child welfare. I believe that with about two hundred physicians present, many of whom never go to any of the larger gatherings of physicians, this is an approach to the handling of this problem.

Dr. Bradley: I want to say just a word about Doctor Rankin's method of beginning educational work at the top instead of at the bottom. He did this in North Carolina by means of post-graduate clinics which he brought to his rural doctors, men who for various reasons would not have been in a position to leave a busy country practice and seek the usual post-graduate course. They were eager however for such advantages. In fact one great difficulty in connection with Dr. Rankin's plan was to keep down the number of men wishing to join the classes.

In co-operation with the State University the State Board of Health engaged two eminent children's specialists and assigned to each of them five counties, one group in the eastern part of the state and one in the western. On every Monday for six weeks each man held a clinic in the county seat of a certain county; on every Tuesday for the same period he held a clinic in the county seat of another county and so on. Physicians subscribing to the course were allowed to bring their own patients for discussion and supervision, and a definite course of instruction was followed.

This course cost each doctor about $30 instead of the $300 or $400 which it would have cost him to take a similar course in any of the large hospital centres and gave him the added advantage of having help with his own local problems instead of those of a congested city.

Unfortunately the war interrupted this experiment which it is hoped will now receive a further trial.

Dr. Alice Weld Tallant, Philadelphia: With reference to the work being done in the medical school, I should be glad to speak of the plan we have in the Woman's Medical College for the senior students. The senior students attend cases in our dispensary out-practice. Each one delivers twelve patients and at the end of the two weeks, during which she attends the patient after confinement, she gives the patient a card telling her to bring her baby back to what we call our Well Babies' clinc, when the baby is a month old. The Well Babies'

Digitized by Google

clinic is held every week, and in that way the students have an opportunity to see their own cases brought back and they do have a personal interest in the case. Later in the year we plan to have as one of our regular classroom exercises, a follow-up day, at which the students can report to the class the cases that they have followed and the results obtained, not simply in their work, but in the Well Babies' clinic as well. We feel that this will give them an idea as to what can be done in keeping babies in good condition, because these babies all come from the poor foreign quarters of Philadelphia where such work is very badly needed.

Dr. Shaw: One of the items in a proposed program for the future work of this Association was the promotion of the teaching of infant hygiene in the medical schools. The American Pediatric Society has appointed a committee of which Dr. Richard Smith is chairman, to prepare a teaching syllabus for medical schools on child hygiene and to encourage its adoption. There is a demand for doctors who are familiar with social medical problems and it's difficult to secure the services of physicians to take charge of the welfare stations.

I believe that a physician engaged in this work should be compensated. He should not be expected to give his time and services free of charge.

Dr. Hamill: Mr. Chairman, I believe Miss Ahrens' question has not been fully answered. I think it is much more than a question of educating the men in medical schools. We have considerably more than a hundred thousand physicians in this country who have never had any teaching in the medical schools along the lines we are discussing. Some of them went out very recently and are going to practice for a good many years. Now, the demand for this kind of service is rapidly increasing and it seems to me, therefore, that we must establish some plan by which we can get this group of men interested, and then give them the kind of information that is essential, and I do not believe it is ever going to be possible to do this through the post graduate schools. The percentage of men returning for post-graduate study is extremely small. We must establish some other plan. I would like to ask Dr. Huenekens whether he does not feel that through the medium of his traveling child welfare clinics there might be a possibility of getting over some kind of education to the medical man as well as to the mothers and their families? I think that it is very essential to teach these men plainly through the medium of demonstration. I can conceive of his equipment being utilized in a rather different way than it is now to interest and educate the medical group. It has a peculiar psychological value because it is something interesting to see and visit, and I can conceive of medical men being attracted by it. I would suggest that the medical profession be interested through the state and county medical societies, so that they would be in a receptive mood when the clinic is taken to them. There was and still is some tendency on the part of medical men to oppose measures that tend to prevent diseases; theoretically such measures would seem to limit the source of revenue of the practitioner of medicine. Those of us who have had experience have long since learned that this is not the fact. The advertising of health increases the demand for physicians. As we increase the demand for protection we increase the demand for the man who can give it. This preventive work

Digitized by Google

must be paid for just as the curative work is paid for. This means that the practitioner of medicine is going to have his work increased instead of decreased by wide public health education. I would like very much to have Dr. Huenekens say what he thinks of the possibility of such a method of teaching the practitioner who cannot afford to leave his practice to go to the cities or towns to get this kind of education.

Dr. Walter H. O. Hoffman, Chicago: Three years ago I was asked to help open an infant welfare station in one of the small cities of Michigan. The Infant Welfare Society of Chicago has followed the plan of never going to any city to help open an infant welfare station unless we had the sanction and were sure of the co-operation of the local medical society. This was true of that particular town.

To my great surprise, I was soon asked to come back to conduct a clinic for one week, and I did so. The interest of the physicians was most gratifying. We had two hours in the morning clinic and two in the evening, one for the lecture, the other for questions. I have been asked since then to come back.

I feel that men who use their holidays playing golf might use them partly at least, in a town like this, to educate the general practitioner, who is surely in need and in favor of having his knowledge broadened.

Next, I should like to say a few words about the Infant Welfare Station in Rush Medical College. We have been conducting that for over two years, and nearly every student takes work in that station for three weeks. For the last six months, we have opened a clinic for older children, and we run that at two different hours. One is in the morning, the other in the evening. It has been most interesting to me to see the great interest which the children of fourteen years take in this clinic.

Dr. Taliaferro Clark, U. S. P. H. Service, Washington: Just a few words, Mr. Chairman. If our work is to be successful in remote communities it will be necessary to secure the co-operation of the local physicians. The work which we are doing while not new to us is new to them, and if they are made to feel that they are ignorant of the newer and later practices we excite what is termed by the psychologist a defensive reaction, which will manifest itself in the form of opposition. We have not the time to send these men back to college and reeducate them in the fundamentals, we have not even the time to send men to the country to give clinics for educational purposes and even if the time allowed we would be unable to establish them in sufficient numbers to make any great impress upon this problem in the near future. However, there is a concerted movement by the American Red Cross, State Boards of Health and other organizations to place public health nurses in rural communities. I feel that if these nurses exercise proper tact, due discretion and do not excite defensive reaction of the local practitioners, they will secure their necessary co-operation, enlighten them in a measure regarding the newer facts regarding child care and will accomplish in the present that which otherwise would take a long time.

Mrs. I. J. N. Perkins, Wilmington, Delaware: What I have to say bears on the point that Dr. Hamill has brought up; that is in regard to the bringing of this information to the physician who is not perhaps interested at first, but who should

Digitized by Google

have information concerning modern methods. A traveling health center has been found to be an excellent way to take such information to the group of physicians referred to. In an experience of a motorized children's health center that made stops at fifty-two places it was noted that physicians of all kinds and grades visited the center. Many gave cordial greeting to the center and its staff, and actively assisted in the examination room. Even the physicians who at first were indifferent were often drawn into the work, and it was rare for the center to leave a place without thanks being expressed by the local physicians to the health center staff, for the opportunity the visit of the centers had given for a demonstration of modern ideas and methods.

Dr. J. H. M. Knox, Jr., Baltimore: In reference to the teaching of medical students and others interested in hygiene, there is in Baltimore as a part of the John Hopkins University, a School of Hygiene devoted to the study and discussion of all phases of the problems of health. In connection with this department field work will be given at the welfare stations of The Babies' Milk Fund Association to certain students interested in the subject of child welfare.

As one looks back over a few years it is very easy to see that the gospel of fair play for infants, commonly called "Infant Welfare Work" is being spread over the country with a rapidity some of us hardly dared dream of a little while ago. Many plans are serviceable, but one which as yet has not been sufficiently made use of is the actual demonstration of results obtained by satisfactorily reaching every baby needing care in a restricted area.

The practitioner of medicine if he can be made familiar with the results of such a demonstration, which if properly carried out will show that the ordinary infant death rate of perhaps 15 per cent. can be reduced to 5 per cent., will immediately become enthusiastic about properly conducted infant welfare work and small centers will be started all over the country. It only needs the actual demonstration in an intelligent community of such a life-saving plan to make similar plans generally undertaken.

It is the function of this organization, which is national in its scope, to help establish work of this kind in various parts of the country in both rural and urban areas. We know now a great deal about approved methods of infant welfare work. We need particularly the actual demonstration of the saving of infant life, and when it has been shown to the average citizen, certainly the general practitioner of medicine will take more interest and active part in work of this kind than has heretofore been the case.

Dr. Huenekens: In our nine rural clinics we have made no especial efforts along the line that Dr. Hamill has suggested, but it certainly offers great possibilities. We write in advance of every clinic we give and invite the local physicians to attend. We are getting more and more response. In many places the physician spends the entire day just watching and observing the work. In one town where we have given these clinics for the last three years — the first town in which they were started — we had more opposition from the physicians than we have ever had since, and I know that the effect on the doctors, there, against their will, has been very profound. They have changed their methods entirely during the past three years. They have been compelled to do it by the force of public opinion. That

Digitized by Google

is, the community has been educated to the value of breast feeding for instance, and some of these doctors who were opposed to the clinics have been forced to be educated against their will.

Dr. Gerstenberger: I personally am not quite as enthusiastic as most of the speakers have been regarding the solution of the problem so far as the graduate physician is concerned, so that he will be a good co-operator such as has been referred to by Miss Ahrens. I really think it is impossible to educate the group of practicing physicians to a point where they are as useful as men who have been trained especially in this work, and as the young men going through the medical schools. I do not say we should not try to teach them something. I think it is at least worth while to try to change their viewpoint that the nurses that come into the district are their enemies. If we will do that we will help this whole situation a great deal, and in doing that I think the scheme Dr. Hoffmann has used and the one Dr. Hamill and Dr. Huenekens and Dr. Rankin suggest are all very, very good, and the personality of the individual making these tours is possibly the most important factor in the propaganda. From things I have heard, I think I can understand why Dr. Hoffmann has been recalled over and over to the same place. It is the way he presents these things to these men, but I doubt whether even he will be able to make them efficient co-operators, and that emphasizes the need of teaching the men at the medical school. We have been doing this at Western Reserve for several years, and while it has been up-hill work, we have succeeded in having the students take this preventive work as a part of their regular compulsory curriculum. They spend about one-eighth of the entire time given to pediatrics in assisting at the clinics and the milk laboratory and in taking lectures. During the last two years men have come to me and said "Doctor, we want to tell you that practically the entire class want to specialize in the diseases of children." I think that in another decade the situation will be greatly improved. In conclusion, I would like to emphasize what Dr. Sedgwick said and that is that the reason we have not had greater enthusiasm in the earlier years of our work, is because medical faculties as a whole do not yet appreciate the importance of this preventive work. Most of them are still too constantly engaged deciding whether the heart is one millimeter out or in to realize the great importance of preventive medicine to the medical student of today.

Dr. S. Josephine Baker, New York: I wish to speak regarding the remarks of Dr. Gerstenberger. We all know, as Dr. Knox has said, that the problem of the whole child welfare movement has come upon us in a rush. As an organized activity, it had its beginning about ten years ago in this country, but as a vital force it is only about six years old. It is not to be wondered, therefore, that we have not changed the mental habits of the various physicians in the United States in their relation to this particular activity in public health, but I think those of us who have been rather close to the movement are feeling quite overwhelmed with the rapidity of the change in opinion among the medical profession. If we look back over the preceding ten years, we will notice a tremendous change in the attitude of the average doctor towards public health work, but as I have said we cannot expect to alter the attitude of the entire medical profession. There is, however, much hope in educating the medical students to the point of view of the importance

Digitized by Google

of public health work, including the particular branch of child hygiene. During the past five years I have given a course in child hygiene to the junior students of New York University and Bellevue Hospital Medical College and it has been exceedingly interesting to note the way in which the students have responded to these lectures. It is not unusual for me to hear from these young men, either directly or indirectly, after they have graduated. Many of them have taken up public health work and see in it a definite career. The colleges in general are awakening to the tremendous importance of including in their curriculum some instruction in public health. A direct evidence of co-operation between the colleges and the municipal health departments has been shown in New York city where the city board of health has established baby health stations in connection with the College of Physicians and Surgeons, Bellevue Medical College and Cornell Medical College. This has been done so that the students may get practical field work in the prevention of the diseases of infancy. It may seem to take us a long time if we work simply through the students, but I think the idea of working through the medical societies is one that should be emphasized. Each one of us should consider himself a special missionary and see that the subject of child hygiene appears with reasonable frequency on the program of every medical society. This is a piece of work we can all do as individual members of the association and it is probably one of the forms of missionary work which our field secretaries can undertake. Little by little we are getting the physicians of the country to understand the importance of the child hygiene program and if the progress of this movement in the United States in the next ten years is as rapid as it has been in the past ten years, we are going to reach the millenium sooner than we expect.

Dr. I. W. Faison, Charlotte, N. C.: I have listened with a good deal of interest to what has been said this afternoon. This is my initial visit to a meeting of this society. I am glad you people have come down into North Carolina. I have been at the business myself a good many years and by myself a good long time. Thirty-five years ago I started to work on this line. We have increased in the state now so that we have got eleven or twelve men in pediatrics. I do not know whether our doctors are a different breed of insects to your doctors up north or not (laughter), but I know that there will be no objection on the part of the doctors of North Carolina to the advancement of this propaganda. I do not live in the district in which these men lectured that Dr. Rankin brought down here, but I took the pleasure of going over to hear Dr. Guersley from Chicago who was nearer my town than Dr. Hill from Boston, both A-1 men, and the work they did in our section of the country is incalculable in dollars and cents. The objection that I had to it all, and the comment that I would make was that really the men that ought to have gone did not have the time or did not have the inclination to claim the time. Guersley's lectures were wonderful and if any of you live in Chicago and know him, when you get back tell him that Dr. Faison says they were very good. The great trouble in the State of North Carolina is to have somebody to carry on this work. The sudden upheaval in the medical world that cut out a good many common medical schools, that increased the years in medicine is for the betterment of the people. It is true, I admit. But in doing that it cut down in our state the number of medical men and we are suffering in the State of North Carolina to-day for

Digitized by Google

doctors for grown people, for children, for negroes, for everybody. In the county in which I live, the largest county in the State of North Carolina, one of the wealthiest counties in the state, one of the best agricultural counties in the state, we have got to-day five medical men in the rural district practicing medicine, two of those over 76 years of age, one of them over 67, one of the others has already made his arrangements to move out of the county and the other is just burned out and had to build a house, and I hope he won't be able to get away. Now, with that, what can you do with this work? We have a state that hasn't any towns in it, all villages when you speak of them in comparison with New York, Chicago and Philadelphia. We have hardly a town in the state of 50,000 inhabitants. We are a rural people from border line to border line.

In our little town we have not enough sickness to scare anybody. We don't have enough of that to be alarmed about as you do in your large cities, and our death rate is not enough to scare anybody.

We have a good health officer. We have had many nurses on account of this war, being near a camp that was run down by some of the business men, and finally run out because the Lord sent water and made mud and we couldn't help it.

We had 20 public health nurses in a town of 50,000 inhabitants, some of them from Chicago. They worked day and night and Sundays thrown in for the betterment of the health of the children of Charlotte, the queen city of our state. I wish you could put three or four of these nurses in every county in the state to talk to the people. Talk is going to be worth a great deal, because if you announce that you are going to have a meeting to talk about the welfare of children, every house in the community will be represented at that meeting. I have gone all over the section within a hundred miles of my town in the last twenty-five years talking no this very subject and trying to have things done. One man can't do very much. I would like you to come back and do something for the welfare of our children in the rural districts of North Carolina.

Chairman: Dr. Wall, have you anything further to say in closing?

Dr. Joseph S. Wall, Washington: Merely this, Mr. Chairman, that it is very gratifying to know that the first group of these men, which includes the embryo physician, is going to be looked after and is being looked after and we have heard this afternoon of many teaching institutions which now include welfare work as part of the curriculum. Now as to the second group — the practitioner, already at work, the public health nurse ought to be one of the missionaries just as much as any other means we use to teach the practitioner and to use a common expression, it doesn't matter how we get it across. It may be done by the North Carolina plan, and it is very pleasant to know that Dr. Faison comes from a state which was the first to establish this plan of carrying the clinic to the doctors. Or we can do it by the Chautauqua idea, but it makes a great deal of difference whether the man is a town doctor, who can attend the medical society where they may have a symposium, or whether he lives in the country and cannot go to the medical society.

The Chairman: The next paper will be on "Help in the Home for the Young Mother with the Young Baby," by Dr. Helen MacMurchy. Unfortunately Dr. MacMurchy could not be here and Miss Mary Power will read her paper.

Digitized by Google

HELP IN THE HOME FOR THE MOTHER WITH A YOUNG BABY.

HELEN MacMURCHY, M. D.

Toronto

The founders of this Association did well for their country. Even the most determined opponent of Associations, who deplores the existence of "so many Associations" and complains about "too many meetings" would be inclined to make an exception to his criticism in favor of this Association. The need for it is only too evident. The work of this Association will be necessary for our time at least and probably to the end of this twentieth century. Two large, hard facts, namely, first, the low and fast decreasing birth-rate, especially among those of whom we often speak of as "good citizens," those, who, from their industry, intelligence, integrity and devotion to the common good, are best fitted for parenthood — and second, the high and slowly decreasing infant mortality rate — these two large, hard facts prove the need for this Association. These two serious conditions may imperil national safety — even national existence. The State cannot survive without the baby. All those who love their country love the baby, for the baby is the hope of the country.

There is no use lamenting over these two hard facts. Never tear your hair if there is anything more useful and less painful that you can do. What are we going to do about the decreasing birth-rate?

Let us try if we can get the confidence of the mother-to-be on the subject. She knows. Voluntary sterility, says the preacher. Why?

James says that voluntary action — what we used to call the will — depends on three things — *ideas* (plenty "neuron-patterns," as the modern psychologist expresses it), *attention* and the *habit of action.*

Let it be granted and firmly understood and held that we do not want to deprive any one of any real or true idea, nor do we wish to hide away any of our own small ideas or knowledge from anybody, especially not from the mother. Nothing can ever justify such a policy. What we want is a policy that shall be entirely fair and reciprocal. We want to tell the mother all we know and give a most sympathetic hearing to all she knows. *She knows.* Will she tell us?

Digitized by Google

The older generation is responsible for giving the younger generation a rich and varied supply of ideals. The idea of motherhood — the ideal of motherhood is far too much neglected. It is not honored as it ought to be and it is not recognized as it ought to be. We never mention it from year's end to year's end. Worse still — we never think of it! The love of children — the longing for children is left to take care of itself. Sir Lauder Brunton used to point out how great an opportunity we neglect in our schools when we object to the desire of the little girls to bring their dolls to school instead of respecting and developing that instinctive half-mothering, half-worshipping affection that enables the little girl to get legitimate satisfaction out of her doll. We might improve upon Sir Lauder Brunton's lesson, and try to see that no little girl lays aside her doll without a chance to transfer to a real baby the genuine affection which is perhaps partly awakened and developed by her own dolls. It is there. It is real. It means something. It has a place in the education of this human being. There is the simple "neuron pattern" for us. What we have to do is to supply natural, beautiful, true, modest, holy ideas of motherhood and of what motherhood means, line upon line, precept upon precept. In this we must take some trouble with our own ideas of motherhood and make them deeper and higher than they are. We do not think half enough of what we owe to our own mothers or of what they did for us. When the ideal of motherhood occupies the place it should in our own hearts, we shall be more fit for association with humanity and better ideals of humanity will pass through us to others. If then we want the will to motherhood we must turn our own hearts and minds to these ideas and ideals of motherhood, which alone can inspire us with that affection for the home and the nation. These ideas and ideals must be implanted and carefully watched, tended and nourished. They will not grow without sowing or planting any more than wheat or roses. They must have from us and from those in whose lives we wish to see them come to fruition, thought and attention. And they must have more. They must have some preparation for action. The future mother lays away her doll when she is somewhere about ten years of age. Until she is twenty or twenty-five, when she often sees a home of her own on the horizon, we keep an awkward and stupid silence about the greatness, the joy and the supreme value of motherhood. Ten years — fifteen years is a long time to keep silence on the greatest

Digitized by Google

thing in the world — motherhood. If we worship it as we should, in our hearts, we shall find some way to keep ourselves in sympathy with those who will be the mothers of the next generation. Who but they can help us? Each generation must have its own mothers. These ten years — from ten to twenty — should have something in them to answer to the psychologist's demand for the habit of action. The school must help the home. The knowledge of bringing up the baby is eagerly received by girls, if it is practical, simple and attractive, as it should be. The main principles of the care of little children are few and easily understood. But they are very important and they must be learned and many people who ought to know them are yet in the darkest ignorance about them.

So much then for voluntary action in this matter. But what are the hindrances in the way? Is there anything to inhibit such action? There is. And here comes in the importance of being in the mother's confidence and being able to look at things from her point of view. She is often full of fears as to suffering, as to danger to health, as to danger to life, which beset the mother's long journey of two hundred and eighty days. True, these fears should be groundless, but nevertheless there they are, and unwise people lay much stress on them and frighten themselves and others with them. Every mother-to-be should have available the best of nursing and medical care during the whole period and if necessary this should be provided at the expense of the community. We must take care of our mothers, and one of the best ways ever discovered to do it is to give the father a father's living wage. Furthermore — and this is one of the reforms for which this Association has always stood — far better education in obstetrics must be given to the medical student. The community should learn that proper medical and nursing care can make the mother safe and nearly always pretty comfortable too — that with anaesthetics, and with antiseptic and aseptic methods and with the resources of modern skill and surgery if need be, the mother has nothing to fear. And knowing this, the community will raise this standard and demand this care. Suffering, the torture of needless fear, the many small, but often painful inconveniences that medical skill and attention and the habit of action on the part of the doctor can remove, will no longer be tolerated and professors of obstetrics everywhere should magnify their office and tell their students that their duty to their patients demands the highest standard of obstetric knowledge and care, and that if they wish to

Digitized by Google

succeed in practice they must be able to come up to that standard or their patients will go to a doctor who can and does come up to it.

Care for the mother-to-be and her child provided by the nation (for the nation's own sake as well as for the mother's sake) properly organized, suitably adapted to the conditions and, if necessary, free of all charge (for it is not everybody who has from $100 to $150 to spare for the expense of the arrival of a new baby) is coming, and has, indeed, already come in some countries. This too, should be provided in the home, for a large part of the time above mentioned. But the subject of medical care and nursing is not the main topic of this paper and will be dealt with by others on the program.

Many needless apprehensions and difficulties may be dispelled or removed by medical and nursing care, but there are some other difficulties not yet generally recognized which exercise an influence on the decreasing birth-rate and the high infant mortality. These difficulties center around the organization of the household. Time was when there was some team-work in the home. The tribute paid to the maiden aunt by W. D. Howells was no empty praise. It was well-deserved. The sister-in-law often saved the situation. The grandmother took the ex-baby — and the baby too, many a time, off the mother's hands and gave her a little peace for an hour or two. The cousin from the country, so famous for her cooking, took charge of the commissariat for six weeks and the mother and the new baby both had rosy cheeks when she left. And above all, the "good girl in the kitchen" took a hand in bringing up the children and there was no noise to distract the mother and the new baby, while that good girl blessed the house.

These days are gone, and better days have come. We must not abuse our age. We have grown out of our social clothes, that is all. We have not got "caught up" with our progress all round yet. Our souls are building more stately mansions for themselves, but the scaffolding is not taken down yet and we have not got things quite to our liking. So the mother, the heroine of all the ages, has the hardest end of it. She must be wife, companion, intellectual equal, intelligent voter, seamstress, laundress, cook, teacher, nurse, first and last aid, housemaid, parlor-maid, marketer, adviser, peacemaker, spiritual guide, comforter, adjuster, arbitrator, director of the household, finance minister and mother too. And she has to play the lonest of all lone hands, because there is no one else to do it. It takes two to make a team.

Digitized by Google

What are we going to do for the mother? Think out the situation. To begin with we do not think nearly as much as we suppose we do. People hate to think a thing out. We must give the mother with the young baby more help in the home, of course. Help to do these necessary things in the day's work of the home. The provision of helps in the home, now arranged for under the British Ministry of Health as a part of their maternity and child welfare schemes, is a great step in advance and should become general. These are intended chiefly for homes where a paid houseworker is not employed. But what about the homes where a paid houseworker is employed, or used to be employed, or would be employed if there were such a thing any more — what about them?

THINK

Is not working in a house, *per se,* a good employment for women?
Is it a healthy employment for women?
Is it well paid?

YES

Is it appreciated?
Has a houseworker generally a comfortable and pretty bedroom?
Has she generally a sitting-room?

NO

Is it a lonely employment?
Is it considered socially undesirable?
Are the hours often unreasonable?

YES

Is the work organized?
Are labor-saving devices generally used?
Does the houseworker have a chance of making a suitable and happy marriage?

NO

Is not this, one of the finest occupations for women, in about the same condition that the occupation of trained nursing was before the advent of Florence Nightingale, when Sairey Gamp reigned supreme?

How did Florence Nightingale raise nursing to the status of a profession? What did she give nurses that they had not before? Three things — *Education, Classification, Certification.* The nurse was trained by those who had the necessary knowledge. The candidates were classified and passed from one class to another according to their

Digitized by Google

knowledge, progress and usefulness. The nurse who deserved it received a certificate. In the employment of the Houseworker there are still a great many valuable women and a great many more have been driven or tempted out of it. But at this time in the world's history there is a great opportunity to elevate the occupation of houseworker into what it ought to be — a new and attractive profession for women. Those who wish to enter it should be encouraged to enter young. Perhaps the State should provide proper, adequate, interesting and suitable training. Classification, such as kitchen assistant, kitchen mistress, laundress, mother's assistant, house mistress, etc., should be most carefully thought out, and the Houseworker should be paid according to her qualifications and her work. There is no reason why a house mistress, for example, should not begin by learning the elementary kitchen work — then scientific cleaning, cooking, laundry work, care of dining-room, bedroom, living-room, duties of children's nurse — duties of housekeeper, including buying, keeping accounts, etc., and some knowledge of first aid work, as well as some knowledge of the refinements and requirements of civilized life.

There must be many here who have received confidences from a Mother who was so overworked, so left alone to struggle with a complicated household, that she simply did not dare to think of another baby coming. So the baby never comes.

Not infrequently a patient, who has come to us for a diagnosis, on being informed of pregnancy, would be so discouraged by household difficulties that she would receive the news with tears, and yet she was a good and loving mother. Husbands often say, "Doctor, if you could give us a good girl in the kitchen my wife would not need any medicine."

This is not a case for individual action. The great advantage of democracy is that we can all work together and help each other. United action can do anything. It can even make up for our lack of a Florence Nightingale.

Too long we have ignored the organization of the home as if it were no concern of ours or of the State. Too long we have left the mother to lift, unaided, burdens that belong to us. Too long we have fixed our attention on commerce and industry and the employments connected with these and neglected the industries and employments which must always centre in the home because they can never be done anywhere else.

Digitized by Google

Would you not like to appoint a committee to consider how we might help to get something done towards providing trained and educated houseworkers to help the mother with a young baby in the home?

DISCUSSION

Mrs. William Lowell Putnam, Boston: I cannot help thinking that the greatest way we could help the young mother would be to help the young father. The young father isn't given half a chance to do his share because of public opinion, and that is more the fault of the women in the community than of the men. I think a great many young fathers are longing for an opportunity, only they think it is unexpected and a little odd, and so they don't take their place. I have mentioned before, but perhaps it won't do any harm to mention again, that a good many years ago when I was carrying on a clinic in Boston, some people, who thought the millenium was coming in 1915, had given that name to a large exhibit. Among other shows my clinic was bathing babies in public — nominal babies — for the good people of Boston thought it indecent to bathe real babies so we had to substitute a doll, but in spite of substituting a doll, it was very noticeable how many young men in the latter twenties came and watched that doll being bathed, and a day or two after they had been there watching, it was very interesting to observe that there came an influx of young women not far from the same age, whom I interpreted as being the young mothers who had been sent by the young fathers, those young men whom I had seen at the exhibit in the late afternoon stopping on their way home from work. We had this exhibit at five in the afternoon and seven in the evening so that working people could come in and I am convinced that the young men only need a very little encouragement to help their wives a great deal more than they do. There is one young man of my acquaintance who on the nurse's day out, when he comes home from business and the mother is putting the baby to bed, carries off the older children saying, "Now come along; we will go to bed," and puts them to bed as a matter of course. I think he is rather unusual in doing this, but I don't believe there is any reason why he should be, indeed, I think there are a great many anxious to help, only they are crowded out. Especially in the early days of the birth of their child they are turned away. A "we don't want *you* here" sort of attitude is taken just at the moment when their hearts are peculiarly open and when a rebuff means a great deal more to them than at any other time.

Dr. Waldron, Yonkers: What Mrs. Putnam has said about the young father has brought to my mind a suggestion that may be opportune. We anticipate in Yonkers, taking the leaflet entitled "Advice to Fathers" and inasmuch as you cannot get fathers to come to hear that advice, making arrangements with the secretaries of the different men's organizations, labor organizations and clubs, to have an opportunity to speak to them in regard to the care that the father should give of the expectant mother and the mother after the baby is born. In that way you can get the information to the foreign-born men who can usually understand English and some of whom can read English. Give them the talk and then the little slip of paper to take home to read and find out their responsibility in the care of that expected or arrived baby.

Digitized by Google

AN INFANT HYGIENE CAMPAIGN OF THE SECOND CENTURY

JOHN A. FOOTE, M. D.,

Washington, D. C.

Much has been written concerning the degeneracy of Roman civilization and the brutal indifference displayed by the civilized, but not humanized, nations of antiquity in their treatment of the newborn. There is abundant evidence in Roman literature of the prevalence of the custom of exposure of infants and of abandonment and infanticide. Plautus and Terence made merry with this theme in more than one comedy, and many of the "modern" cynical quips on matrimony unquestionably have come down from the later days of the Roman Republic when, as Seneca says, "some women reckoned their years by their husbands." And yet — there is another side to this story of which we have heard very little — the side which deals with the efforts made by thoughtful men and women of that day to put an end to practices which they realized must eventually sap the foundations of national virility and which in the second century A. D. crystallized into what seems, to this writer at least, more than sporadic effort to teach the lessons of infant hygiene to the general public.

We learned in our primary schools that the legendary Romulus was himself an exposed infant who had been suckled by a wolf. To increase his warlike subjects when he became ruler he obliged his people to bring up all male children except those deformed and crippled, and also the firstborn of all females. But there was also a human note in this decree, for even the crippled could not be exposed unless five neighbors gave approval.

The word "proletariat," so much used nowadays, had a specific application in its original meaning: the *proletariat* consisted of citizens who had no property, but who were valuable to the State through the children which they produced. In the Rome of Augustus corruption of morals with the consequent inroads upon the legitimate population of the great world-metropolis caused that astute ruler to give early attention to legislation regulating marriage and celibacy — the "*lex Julia et Papia.*" In the old Rome of the *patria protestas* the father had the power of life or death over his children; now, however, the

Digitized by Google

mere possession or non-possession of offspring determine a man's legal rights. A married man with no children could only take half of an inheritance. In the holding of certain offices the candidate who had the most children was given preference. All personal taxes were remitted to Roman citizens who had three children. Citizens who lived in Italy enjoyed this privilege if they had four children, and those who lived in the provinces if they had five.[1]

These laws remained at least partly in force, despite the changes of Carcalla and Constantine, until their abrogation by Justinian. Augustus also set aside a reward of 2,000 sesterces (about $40) for anybody who would bring up an orphan. From the death of Augustus 14 A. D., to the accession of Nerva, 96 A. D., little social progress obtained amidst the political and military turmoil of Rome. But from the time of Nerva to the passing of the Antonine Emperors such advances were made as to emphatically warrant the assumption that child welfare of a primitive kind was being propagated in Rome during the second century. Nerva tried to put a stop to infant abandonment by having the State subsidize poor parents. (97 A. D.) Three years later 5,000 children were receiving State aid. A coin shows the Emperor seated in a chair dispensing charity to a boy and girl, with the inscription "Tutela Italia." Trajan loaned money to landowners, the interest of which was used to support parentless or abandoned children.

Hadrian, who had Plutarch as a master and Suetonius for a secretary and who was himself a tremendous student and a great traveler, might be expected to have enlightened and liberal views in spite of his imperial absolutism. "Here in the second century we see an emperor," Duruy says, "employing logic in the service of humanity." For he ruled that any woman who had been free at the time of pregnancy must as a result give birth to a free child. Women were allowed to make wills and inherit rights in the property of sons who died intestate. Carthaginian priests had been forbidden by Tiberius to offer children in sacrifice to Moloch; this law was repeated and enforced by Hadrian.

The right of the Roman father to kill his own son was abrogated — Hadrian banishing a father who had done this. The reign of law as interpreted by jurists began with this emperor.

---

[1] "The Child in Human Progress." G. H. Paine, New York, 1916, pp. 227 et seq.,

Digitized by Google

Antoninus Pius extended throughout Italy the loan system of Nerva, the large income derived therefrom being devoted to the care of abandoned children. An institution for the care of female orphans, heretofore exposed without scruple, was founded in honor of his wife Faustina, the "*puellae alimentariae Faustinae.*" A medal shows on one side Faustina and on the obverse Antoninus surrounded by children and inscribed "Puellae Faustianiae." [2]

This work was continued and amplified by the great philosophic emperor, Marcus Aurelius. But not only were these passive measures employed to prevent destruction of child life, but books were written bearing on the problems of the care of the child and the importance of rearing healthy offspring — to spread the propaganda of infant care.

It was during the reign of Trajan, between 110 and 130, that Rome became the home of the greatest obstetrician and pediatrician of antiquity — Soranus of Ephesus. This wonderful physician was the most illustrious of the school of Methodists, founded by Asklepiades — but he was too great to be bounded by the limitations of any narrow cult. He was probably educated in Alexandria, but he came from a highly civilized region of Asia Minor which had flourished under Grecian influences for many generations, although today little remains but a memory of the name of its beautiful city — Ephesus. The obstetrics of that day was practiced by midwives, usually slaves. In difficult or important cases the physician was called. In the work of Soranus, it is obvious that the directions for the care of the child were written for use by the nurse or the mother, and that this was to a certain degree a popular treatise similar to the "baby books" of today. Translations and commentaries on Soranus have been made in Latin, German and Russian; Lieutenant-Colonel Fielding Garrison in an abstract not as yet published, was probably the first to summarize the pediatrics of the Ephesian physician in English.

At the Eleventh International Medical Congress in Rome (1895), I. V. 'Troitski, writing in Russian, compared in parallel columns the practice of Soranus of the second century with the teachings of authorities of the late nineteenth century, an interesting document which, through the assistance of Mr. J. H. Ohsol, of Washington, I was enabled to study carefully.[3]

---

[2] Ibid I, p. 248.

[3] "Soranus Ephesius," I. V. Troitski, Kiev 1895 (in Russian).

Digitized by Google

Anyone who examines Soranus' work on pediatrics, even without its commentaries, will scarcely doubt that the Roman physician wrote the most modern work on infant nursing that appeared up to a century ago. The changes in modern nursing care would be surprisingly few, if we excluded the innovations due to our knowledge of antiseptics, while the practical instruction is so sound, that with some editing and the abandonment of swaddling and wet nursing, Soranus textbook could be used in the education of the nurse or mother, certainly to greater advantage than any work of a similar kind written up to the time of Underwood.

Beginning with the twenty-sixth chapter of his book[4] (Sorani Gynaeciorum [cap xxvi–xlii, Greek Text]), Soranus tells how to determine the strength and vitality of the newborn, by its cry and its appearance. The method of tying the umbilical cord is next considered. He shows splendid surgical sense in his directions, warning against the use of dull instruments and lacerating methods. He tells how to care for the skin of the newborn, and dismisses several faulty methods of the past. Swaddling he thinks necessary to keep the infant's limbs straight, yet he cautions against certain vicious practices in connection with this custom, gives each procedure in great detail, and insists on cleanliness. The bedding and bedroom of the newborn next claim his attention, and he insists on a soft mattress filled with grass or linden fluff, again frequent changes of clothing and avoidance of bad odors.

The feeding of the infant forms an extensive chapter. Soranus declaims against giving foreign food to the newborn. No food is needed for three days, he says. Possibly a little honey may be given with water, but nothing else. As most of the obstetrics of that day were performed by widwives there was much hemorrhage and many infections in childbirth. Milk after hemorrhage or during fever is bad, says Soranus, so it is best to secure a wet nurse for the first few weeks. He believes in wet nurses — it saves the mother for future childbearing, and also saves her beauty. Slaves were most frequently used for this purpose. Soranus does not say that wet-nursing is the best practice — but that it is the most expedient. Of course only the wealthy employed physicians in that day and only the very wealthy an obstetrician.

[4] "Sorani Gynaeciorum," ed. Valentine Rose, pp. 248, 292, Capp XXVI–XLII Greek text, Leipsic 1882.

Digitized by Google

Soranus unquestionably had a wealthy clientele, for he advises not one wet nurse, but two or three, in case one should be taken ill.

He tells very explicitly what kind of a woman to choose as a wet nurse, how she should qualify physically and mentally. "The essential mental qualities of a good nurse," he says, "are patience, common sense, good nature or gentleness and neatness." No one before or since has written more intelligently or so exhaustively on this subject.

To judge of the quality of the nurses's milk he gives several tests. Do not judge the milk simply by a poor appearance of the infant, he says, for the milk may be of the best, and the infant have some disease which prevents proper nutrition. To test the quality of the milk he gives information as to its proper color, its odor, its consistency. Its density is established by mixing it with water and observing its behavior. He describes the taste of normal human milk and how it should act when exposed to the air. Its behavior when shaken, and the appearance and persistence of air bubbles furnishes another index to its density. Also when a drop of milk is placed on the finger nail it should not run off quickly, nor change its shape when the finger is shaken moderately, but it should do so when the hand is shaken rapidly. When milk proves satisfactory under these tests, even when the mother is not on a proper diet, it is very good milk, says Soranus. Crude as these tests were, they were valuable and practical, and showed what a careful, reasonable observer Soranus must have been.

He not only prescribed a rational diet for the nursing woman, but also special exercises. The influence of indigestion on the quality of milk was known and emphasized by him. He warns against excessive use of wine by the nurse, and dissipation, generally, he condemns. The technic of breast feeding is next taken up, conditions when the nurse should not nurse the child, the proper position for nurse and infant, etc., and he says: "Feeding at irregular intervals and often during the day and especially during the night may be the cause of sickness in the infant." Soranus emphasizes this by saying that the infant should never be nursed to satiation, nor should the nurse sleep with the infant nor allow the infant to sleep while at the breast. Moderate crying is helpful to the infant as exercise. Crying, he says, is not caused by hunger alone. An inconvenient position, pressure of the clothing, irritation of the skin, too much food, excessive heat, colic and various diseases may cause crying. He then tells with great

Digitized by Google

patience how to differentiate between the various causes. We have read this same material in our "modern" baby books; it has changed very little.

Be careful not to move or swing the baby after feeding it — or you will have vomiting, he says; and if the baby cries after feeding, do not threaten or yell at it; caress it, amuse it. Fear is bad for infants.

To increase the quality and quantity of milk he advises a careful examination of the nurse to see if any disease is present. If none is discovered, then the watery milk may be improved by eating concentrated foods such as eggs, goats' milk, flour meal, etc., and drinking less water. Light exercise, singing, discus throwing, deep breathing and massage are also recommended. "All medicines and popular remedies used to increase the quality of milk produced injure the stomach and the digestion of the nurse," he says, continuing: "The use of such medicines is simply injurious."

To correct heavy milk he prescribes baths, lighter food and more liquids.

He tells in great detail how to bathe and clothe the infant. To atone for the inactivity produced by swaddling, Soranus gives a complete system of massage and passive movements, which exercise the infant's muscles. In all of these he is striving to prevent asymmetrical development and deformities of the limbs.

How to care for the umbilical cord, to prevent hernia, when and how to discontinue swaddling, how to teach the baby to sit up and walk, and when and how to wean, are among the things he writes about. He warns against the premature use of starchy foods —"nothing but milk should be given up to the sixth month." Honey is first allowed, later barley soup, then gruel from parched grain, last of all eggs. The change to more solid foods is permissible at one and one-half or two years. The infant should preferably be weaned in the spring — never in the summer. Partial breast feeding should be continued for one and one-half to two years.

The fat infant should be given less food; the thin one more nourishing food. He discusses rational methods of curbing the tendency of some children to overeat and of inducing others with poor appetites to eat enough. If a child becomes ill during weaning, he says, stop weaning at once.

The eruption of teeth is written of briefly. The gums must not be

Digitized by Google

pressed on or bruised at this time. The nurse also should modify her milk and he tells her how to do this by taking less solid food and more water.

Nothing written up to the late eighteenth century has equaled the work of this physician of eighteen hundred years ago in clearness, in sound hygienic sense and in independence of thought. This will be all the more remarkable if we remember that he wrote on a subject that is even today overgrown with unsound tradition.

Soranus did not emphasize but rather approved the custom long established in both Greece and Rome of allowing infants to be nursed by wet nurses rather than their mothers. This course was to him, perhaps, the path of least resistance. He was a Greek and many of the ethnic arguments used later by Gellius did not occur to him. It was better to have infants nursed by healthy slaves than by dissipated mothers; that was probably his real meaning when he said wet-nursing was "more expedient" than maternal feeding.

History cannot trace Soranus after the year 130 A. D. In that same year Aulus Gellius, noted later as a Roman lawyer and litterateur, was born. Gellius spent some time in Greece, and returning to Rome published his Noctes Atticæ, a series of discourses on language, literature, history, sociology and many other things. The Emperor Antoninus Pius, whose reign began in 138, inaugurated an unprecedented era of peace and happiness in Rome. Conditions were favorable for the diffusion of knowledge and the spread of ideas relating to public welfare, and to the growth of altruism. So, when the Greek philosopher Favorinus speaks in the pages of Gellius, he is undoubtedly voicing a positive sentiment concerning the custom of wet nursing that had been growing up in Greece as well as in Rome, in marked contrast to what was believed and practiced even in the time of Soranus. Strangely enough, this speech of a legendary Greek philosopher left a far deeper impress on the later medical literature than the splendid treatise of the historical Greek physician — perhaps because the metaphysical style and emperical method of Gellius appealed more strongly than Soranus' rational aphorisms, to the post-mediæval mind. The didactic poem, *La Balia,* written about 1560 by Luigo Tansillo, was a metrical setting in Italian of this essay.[5] The same theories

[5] "The Nurse, a poem, translated from the Italian of Luigo Tansillo, by William Rosco — Liverpool, London, 1798.

Digitized by Google

were set forth in Scævole de St. Marthe's Latin didactic poem, "Pædotrophia," published in 1584.[6] In fact its influence can be seen in most of the early writers on nursing — Bagellardo being one of the very first. Omnibus Ferrarius, of Verona (1577), quotes the lambs and goats-wool incident, as also does John Pechy in his treatise on infant feeding (London, 1596). Jacques Guillemau (1609) says, "the mother who nurses her own infant is the complete mother," almost the exact quotation of Gellius.[7] Van Swieten's "Aphorisms of Boerhave." also shows its influence.[8] In spite of its praiseworthy purpose and its undoubted influence, the essay was very defective in its physiology. Perhaps it made even better propaganda because of that, but it is not true that milk is simply blood turned white, nor are mental and physical characteristics transmitted by maternal milk. Thus have the microscope and the test tube shattered many a picturesque belief. The disregard shown by the great philosophers, Plato and Aristotle, to the rights of the living child is in marked contrast to the stand of Favorinus on the question of the destruction of the embryo "while it is still in the hands of its artificer, nature," which he characterizes a practice "deserving of public detestation and abhorrence." This would seem a strange doctrine for that day — yet it is simply another evidence of a changed sentiment of thinking men and women in their attitude toward the child.

The following is a translation of the Gellius essay, a familiar work to all students of Latin literature:

"Dissertation of the philosopher Favorinus in which he induced a lady of rank to suckle her child herself, and not to employ nurses."[9]

"Word was brought to Favorinus, the philosopher, when I was with him, that the wife of one of his disciples had been confined and a son was added to the family of his pupil. "'Let us go,'" he said, "'to see the woman and congratulate the father.'" The father was a senator and of noble family. All of us who were present, followed him to the

---

[6] "Pædotrophia," translated from the Latin of Scævole de St. Marthe, by H. W. Tytler, M. D., London 1797.

[7] "Some Seventeenth Century Writings on Diseases of Children," G. Still, in "Contributions to Medical and Biological Research," Osler Anniversary Volume, (——), New York, 1919.

[8] "The Commentaries on the Aphorisms of Herman Boerhave" Van Swieten, translated by Kapton and others, Edinburg, 1776.

[9] Noctes Atticae, Aulus Gellius, Lib. x Cap. iii. See also translation by Beloe — London 1797.

Digitized by Google

house and entered with him. As soon as he had entered, embracing and congratulating the father, he sat down and inquired whether the labor had been long and painful. When he was informed that the young mother, overcome with fatigue, had gone to sleep, he began to converse more at ease. "'I have no doubt,'" he remarked, "'but that she will suckle her son herself.'"

But when the mother of the lady said that she must spare her daughter and find nurses for the child, that to the pains of childbirth might not be added the toilsome and difficult task of suckling the infant, he replied:

"'I entreat you, madam, to allow her to be the sole and entire mother of her own son. For how unnatural it is, how imperfect and half motherly only, to bring forth a child and instantly send him away; to nourish in her own womb, with her own blood, something which she has never seen and then to refuse to support with her own milk the object which she now sees, endowed with life and human attributes, imploring the tender care of a mother.'"

"And do you suppose," he continued, "that nature has given bosoms to women only to add to their beauty — more for the sake of ornament than for the purpose of nourishing children? Because some women believe this (and may this be far from you)— they unnaturally endeavor to dry up and extinguish that sacred fountain of the body, the natural nourishment of man, with great hazard, turning and corrupting the channel of their milk, lest it should render the distinction of their beauty less marked."

"They do this with the same insensibility as those who endeavor by the use of quack medicines and in other ways to destroy their conceptions, lest the same should injure their persons and their figures. Since the destruction of a human being in its first formation, while he is still in the hands of his artificer, nature, receiving life itself, is deserving of public detestation and abhorrence, how much more so must it be to deprive a child of its proper, its accustomed and congenial nutriment when at last it is perfected and produced to the world? It will be said, perhaps, that this omission is of no consequence provided it be nourished and kept alive by human milk, whoever may nurse it. Why does not he who says this, if he be so ignorant of nature's workings, suppose likewise, that it is of no consequence from what body or from what blood a human being is formed and put together? Is not that

Digitized by Google

which is now in the breasts the blood of the mother which has become white in color by much spirit and warmth — indeed the same that was in the womb? And is not the wisdom of nature apparent also in this — that as soon as this blood, which is the artificer, has formed the new human body within its penetralia, it rises into the upper parts and is ready to cherish the first particles of life and light, supplying known and familiar food to the newborn infants? Wherefore it is believed with reason, that as the power and quantity of the parent cells avail to form likenesses of the body and mind, in the same degree also the nature and properties of the milk are potent toward affecting the same purpose. Nor is this confined to the human race; it is also observed in beasts. For if kids are brought up by the milk of sheep, or lambs with goats, it is plain by experience that in the former is produced a harsher sort of wool, in the latter a softer species of hair. So in trees and in corn, their strength and vigor is great in proportion to the quality of the soil and moisture which nourish them, rather than of the seed which is put in the ground. Thus you often see a strong and flourishing tree when transplanted die away from the inferior quality of the soil, so what can be the reason, then, I ask you, that you should corrupt the dignity of a newborn human being formed in body and mind from principles of distinguished excellence, by the foreign and degenerate nourishment of another's milk? Particularly if she whom you hire for the purpose of supplying the milk be a slave, or of servile condition, or, as often happens, of a foreign or barbarous nation, or if she be dishonest, or ugly, or unchaste, or drunken; for often, without hesitation, anyone is hired who happens to have milk when wanted. And shall we then suffer our own child to be polluted with a pernicious contagion, and to inhale into its body and mind a spirit drawn from a body and mind of the worst nature? This, no doubt, is the cause of what we so often wonder at, that the children of chaste women often turn out unlike their parents, being different both in body and mind. Wisely and skilfully has our poet Virgil spoken in imitation of Homer's lines:

> "Sure Peleus ne'er begat a son like thee
> Nor Thetis gave thee birth; the azure sea
> Produced thee, or the flinty rocks alone
> Were the fierce parents of so fierce a son."
>
> (4th Æneid — V. 367)

Digitized by Google

He charges him not only upon the circumstance of his birth, but his subsequent education, which he has called fierce and savage. Virgil to the Homeric description has added these words:

"And fierce Hyrcanian tigers gave thee suck."

"Undoubtedly in forming the manners, the nature of the milk takes in a great measure the disposition of the person who supplies it, and then forms from the seed of the father, and the person and spirit of the mother, the infant offspring. And, besides, who can consider it a matter to be treated with negligence or contempt that while they desert their own offspring, driving it from themselves and committing it for nourishment to the care of others, they cut off, or at least loosen and relax, that mental obligation, that tie of affection, by which nature binds parents to their children? When a child is removed from its mother and given to a stranger the energy of maternal fondness is checked little by little, and all the vehemence of impatient solicitude is put to silence. And it becomes much more easy to forget a child which is put out to nurse, than one of which death has deprived us. Moreover, the natural affection of a child, its fondness, its familiarity, is directed to that object only from which it receives its nourishment, and as a consequence (as in the case of infants exposed at birth), the child having no knowledge of its mother, does not regret her loss.

"Having by this destroyed the foundations of natural affection, however, children thus brought up may seem to love their father or mother, that regard of theirs is not natural, but the result of civil obligation and social opinion."

"These sentiments, which I have heard Favorinus deliver in Greek, I have related so far as I could for the sake of their common utility. But the elegancies, the copiousness and the flow of his words could hardly be arrived by any power of Roman eloquence — least of all by any which I possess."

When this was written the Emperor Antoninus Pius was in power, and was destined to be succeeded by Antoninus Marcus Aurelius. There can be little doubt that during these years, which have been characterized as the happiest for children in the history of ancient Rome, the gentle and humanitarian trend of the Stoic philosophy

Digitized by Google

diffused and inculcated by the Antonine Emperors, had done much to spread the germinal ideas of such pioneers as Soranus and Aulus Gellius. A campaign for infant hygiene, small in its beginnings, was in the making, though its immediate and even remote effects were soon to be swept away in the bloody days that stretched from the end of the reign of Marcus Aurelius to the accession of Septimus Severus.

Digitized by Google

PRE-SCHOOL AGE

CHAIRMAN

Dr. Fritz B. Talbot, Boston

Digitized by Google

Digitized by Google

WHAT ENGLAND AND SCOTLAND ARE DOING FOR CHILDREN OF PRE-SCHOOL AGE

WILLIAM PALMER LUCAS, M.D.,

Chief of the Children's Bureau of the American Red Cross, France.

Professor of Pediatrics, University of California Medical School, San Francisco.

The material on which this paper is based was collected by Miss Ellen C. Babbett of the American Red Cross Children's Bureau. The collection is now in the library of the American Red Cross, Washington, D. C.

The period of the pre-school age has been until recently the most neglected period of childhood — the No Man's Land of public endeavor. The baby, the real baby, under a year, demands the family attention from the mere point of view of his helplessness. When the baby slips off his mother's lap and begins his own adventure he has been permitted to roam with a lack of care and supervision that has had disastrous results. And yet from the point of view of health and education the period is one of vital importance. It is a period of growth of organs and brain and cannot be neglected. It is important to bring this discussion before you because this association has done such good work on infant mortality, from birth through infancy, or from 0 to 2. The period from 0 to 1 has been covered very well indeed by the efforts of this association. From 1 to 2 has been done far better than from 2 to 5 and it would seem but a logical step to complete the entire pre-school period.

The importance of the pre-school period has been forced upon us by the school findings. When, at five or six, the child makes his first public contact, he faces a medical inspection and the findings of the school medical inspection have strongly emphasized the demands of the pre-school period.

After studying the conditions of child life here in our own country and in Great Britain, Belgium and France, I want to present to you briefly the work in England and Scotland because these countries have led in an adequate program of child welfare. These countries have been able to do this, I believe, because of the strength of their central and local governing bodies in the public health service. The strength of these boards lay in their power to stimulate the carrying out of the finest type of preventive measures in public health. Sir Arthur News-

Digitized by Google

holme, as the Medical Officer of the Local Government Board* of England and Wales, and Sir W. Leslie Mackenzie, the Medical Member of the Local Government Board for Scotland, have been men of practical vision in matters of public health. Their findings are sound because they are based *upon facts,* and they were able to get these facts because they had accurate statistics upon which to work. The Registrar General's statistics relating to every chief area in the country were supplemented by special intensive studies in the Medical Department of the Local Government Board, and by the local reports of Medical Officers of Health. The Local Government Board's report on Maternity and Child Welfare shows "that the birth rate and death rate for England and Wales since 1870 shows the steady decline in the birth rate and in the general death rate, while the infant death rate, after remaining more or less stationary for the 30 years, 1870–1900, has declined since in a greater degree than the general death rate.

ENGLAND AND WALES

PERIODS	Mean Annual Rates Per 1,000 Living			Deaths of infants per 1,000 births
	Births	Deaths	Deaths under five years	
1871–1880	35.4	20.3	63.4	149
1881–1890	32.4	18.6	56.8	142
1891–1900	29.9	18.1	57.7	153
1901–1910	27.2	15.2	46.0	128
1911–1915	23.6	13.8	36.7	110
1916–	21.6	14.0	.....	91

"Health visitors in England and Wales began to be appointed between 1890 and 1900. The Midwives Act became a law in 1902; the first infant consultation was opened in 1906 and the Notification of Births Act was passed in 1907," and was made compulsory in every district in 1915. These measures and the action following on them may properly be credited with much of the decrease in the infant death rate.[1]

(1) See p. 152.

* The Local Government Board is the central authority for supervising the administration of public health.

Digitized by Google

The United States shares with France and Belgium the lack of accurate statistics. The British have had the statistics of births and deaths collected with almost complete accuracy and carefully analyzed; and these and a large number of reportable diseases have formed the basis upon which to build their splendid public health program.

Every county of England, Scotland and Wales has public health officials with definite training in public health matters and a diploma in public health certifying to this fact. Their statistics show that the diminution in infant and child mortality has gone hand in hand with an increasingly effective public health and educational system, and with steady improvement in social, sanitary, and housing conditions.

The Carnegie United Kingdom Trust Report on the Physical Welfare of Mothers and Children in Scotland includes Sir Leslie Mackenzie's paper on "The Child of the One-Room House." This study of a special problem puts clearly before you the relation of housing, not only to a diminishing death rate, but to diminishing illness. His study is based upon a series of concrete cases taken from actual research by competent people who knew how to look at facts and how to put the primary matters down in a paper. I can give but a brief section of that illuminating paper. His approach to the subject is this:

> "Houses can be classified according to the families they accommodate; but they can also be classified according to the effects on the child. If the family is the growing point of society the child is the growing point of the family. If you cannot understand social institutions unless you realize that they have their roots in the needs of the family, neither can you understand the functions of the family without realizing that they have their roots in the needs of the child."

Then follow the concrete cases in city, town, and country; and his conclusions upon one-room houses in the great cities are five:

> "(1) The One-Room family cannot feed the One-Room child properly.
> "(2) The One-Room family cannot clean or clothe the One-Room child properly.
> "(3) The One-Room family cannot procure sleep enough for the One-Room child.
> "(4) The One-Room family cannot educate the One-Room child.
> "(5) The One-Room house cannot become a home."

The mortality and morbidity tables upon which these conclusions are based show conclusively the higher death rate among the children of the one-room house. Dr. Chalmers, Medical Officer of Health, shows that in Glasgow in 1911, "11 per cent of the total population consisted of children under five years; in the one-apartment population

Digitized by Google

they formed almost 19 per cent. The difference in the male and female death rates all pointed to the increase among children under five in the one-room house. The last point in relation to housing is that of its effect on growth, and the facts are these: The children of the one-room house are, at every age from 2 to 14, lowest in height and weight.[2]

In both England and Scotland most careful investigation of the day nurseries shows that under present economic conditions of women workers, the nursery is a necessary part of the program. Another section has been added in the form of the Toddlers Playgrounds — outdoor play under supervision and training for the toddlers whose mothers have a nursing baby to care for.

The Local Government Boards of these countries have been able to push forward the entire public health program rapidly because they have the power to grant to each community one-half of what said community through its local authorities and voluntary agencies spends upon certain services for the health of expectant mothers, nursing mothers and children under five years of age. In the Maternity and Child Welfare Acts of 1918, the grants provided for the pre-school age are as follows:

1. The expenses of a center, i. e., an institution providing any or all of the following activities — medical supervision and advice for expectant and nursing mothers and for children under five years and medical treatment at the center for cases needing it.

2. Arrangements for instruction in the general hygiene of maternity and childhood.

3. Hospital treatment provided or contracted for by local authorities for children under five years of age found to need in-patient treatment.

4. The cost of food provided for expectant mothers and nursing mothers and for children under five years of age where such provision is certified by the medical officer of the center or by the Medical Officer of Health to be necessary and where the case is necessitous.

5. Expenses of creches and day nurseries and other arrangements for attending to the health of the children under five years of age whose mothers go out to work.

6. The provision of homes and other arrangements for attending to the health of children under five years of age of widowed, deserted and unmarried mothers.

7. Experimental work for the health of expectant and nursing mothers and of infants and children under five."

(2) See p. 152.

Digitized by Google

The following table shows the increase each year in the grants given on the 50 per cent basis by the Local Government Board and the Board of Education.

Financial Year	Grants of Local Government Board (Pounds Sterling))	Grants of Board of Education (Pounds Sterling))
1914–15	11,488	10,830
1915–16	41,466	15,334
1916–17	67,961	19,023
1917–18	122,285	24,110
1918–19 (estimated)	209,000	44,000

These grants do not cover the entire scope of child-welfare work carried out throughout the country, and their amount must not be taken as a complete indication of the extent of this work.[3]

A further power of the Local Government Board is applied through its insistence upon the necessity of providing health visitors. The English health visitor is quite different from our visiting nurse. The health visitor has met a pre-educational requirement of a high school or a normal school and then taken a short general course in public health and personal hygiene and the fundamental theories of nursing, combined with practical contact with many aspects of health, housing, sanitation, etc. She is a combined social worker, health visitor, sanitary inspector, dietitian and home-maker. Her business is not nursing the sick but inspecting and guarding the well. In some cities in England the health visitor visits only mothers and babies. In the country districts a more generalized plan is used. The health visitor is sometimes the tuberculosis nurse and the school nurse and in a widely scattered area she is the district nurse. But the chief emphasis in the training of the health visitor in England is upon hygiene and her work is practical, instructive and educational.

According to the Local Government Board report of 1917–18, on June 1, 1918, England and Wales had 751 whole time health visitors, 760 part time, and 1,044 district nurses under local authorities in maternal and child welfare work, 320 health visitors employed by voluntary societies.[4]

Sir Leslie Mackenzie says of Scotland, "Our total number of nurses include the Queen's nurses (fully trained nurses), partially trained nurses from other institutions, the nurses trained in maternity alone, midwives, outdoor nurses for infectious diseases (including tuberculosis) and school nurses." Health visitors for Scotland are drawn from all sources. In closing Sir Leslie makes this comment on nurses

(3) (4) See p. 152.

Digitized by Google

as Health Visitors: "Undoubtedly, the special district training is a good ground work for health visiting. But I mention the point here rather to indicate how the art of nursing necessarily becomes specialized as preventive medicine comes closer to the facts. The health visitor of the future will not supersede the nurse but she will always have in her curriculum some training in nurse's work. The office of health visitor has developed an elaborate technique of its own; and the time has come for training health visitors along the lines of a specialized curriculum. She must now be trained not only for the superintendence of infants under one but of all children under the age of five." [2]

By the Education Act of 1918, the educational authorities were given power to make arrangements for the establishment of nursery schools for children between the ages of 2 and 5 years, and "for attending to the health, nourishment and physical welfare of the children attending such schools." The clause, liberally interpreted, should, through the provision of wholesome food, fresh air and exercise, rest or sleep as required, exert a profound influence on the physique of many of our children in our cities and large towns, particularly if the work is properly linked up with the Infant Welfare service.[5]

The findings of the medical inspection of children on admission to school, have shown how many are the defects and diseases contracted before coming to school, most of which could have been prevented in earlier years.

The application of the Local Government Board Grant in a city like Glasgow is taking this form. It includes information obtained during the first five years of life. The health visitor's work is extended, the staff of both health visitors and clerks is increased, so that the baby will be visited six times at least during the first year of life, and the child up to five years of age, at least four times annually. The extension of courses of instruction to mothers to include the pre-school age has been arranged.[6]

All the reports of the local government board of England and Wales show the increasing appreciation of the importance of communicable diseases, such as whooping cough, measles, mumps, tuberculous meningitis, pneumonia, bronchitis, etc. These diseases have their greatest toll not only of mortality but of handicaps, left for the child to meet during this period. Sir Arthur Newsholme shows "the proportion of total deaths at ages 0 to 5 due to communicable diseases to be 57.9 per cent." [7]

(5) (6) (7) See p. 152.

Digitized by Google

In his report on Child Mortality at ages 0 to 5, Sir Arthur shows that in England and Wales from 1911 to 1914 the percentage of total mortality from all causes was as follows: at the age period 2 to 5, a mortality from congenital debility 0.5, measles 17.0, whooping cough 6.9, diphtheria and croup 8.8, scarlet fever 4.3, diarrheal diseases 5.0, tuberculosis 12.6, bronchitis 3.7, pneumonia 16.6, other infectious diseases 0.8, meningitis 3.6, all other diseases 20.2. The total deaths at all ages in England and Wales for those years were 2,036,466; of that number 575,078 or 28.2 per cent occurred during the first five years after birth, and of those deaths, 304,334, or 52.9 per cent were caused by just six diseases, tuberculosis, bronchitis, pneumonia, measles, whooping cough and diarrheal diseases. During 1911–1914, 25.7 per cent of the total deaths occurring in the age period 1 to 2 were caused by measles and whooping cough.[8]

In discussing the principal causes of death of pre-school children in Scotland, Sir Leslie Mackenzie says: "they are almost all capable of partial or total prevention, they all require further research. The three most deadly infections of pre-school life are measles, whooping cough, and tuberculosis. Measles and whooping cough, because they are infectious in the early stages before diagnosis is possible, and because they are easily communicated come in tornadoes every year or two. In the year 1915, measles killed 2,221 persons; of these 2,065 were children under five years of age, 624 being under one year. In the same year whooping cough killed 2,820 persons; of these 2,733 were children under five years, 1,229 of these being under one year. The five years ending with 1915, showed a drain upon the child life of Scotland amounting to the killing of 7,367 children under five, say seven battalions. Whooping cough killed 9,434 children under five. The two diseases killed 16,801 children of pre-school age, say 16 battalions.[2] In contrast with measles and whooping cough, scarlet fever and diphtheria are merciful. In the same years scarlet fever killed 1,733 children under five, 149 of these being under one; diphtheria killed 2,478, 414 under one year. Tuberculosis killed 7,768 children under five, 5,183 over one and under five. Measles, scarlet fever, whooping cough and diphtheria together killed 21,426 children under five; 14,326 of these were over one and under five.

The total deaths in Scotland during 1911 to 1915 of children at

(8) See p. 152.

Digitized by Google

ages 0 to 5 was 106,122. "Five army divisions are wiped out in five years. But these are only the dead. The disabled, the damaged, the deformed, the spoiled, cannot be counted. They keep coming forward at the dispensaries, the out-patient departments, the school children, the crippled homes, the sick children's hospitals, the poorhouses. They are many times more than the dead, but how many times more we cannot tell. The system of registration deals with the dead very comprehensively; it has not yet overtaken with any degree of adequacy the diseased, or the damaged, or the deformed, or the spoiled. That is a task that lies in front of the new schemes of child welfare." [2]

Upon such figures as these England and Scotland push forward their provisions for more health visitors, more consultations for the pre-school period, and continuous education of the mothers. Again in a mortal fight, Great Britain is bridging a gap. As Sir Leslie MacKenzie puts it, "It is now only that the ex-baby has begun to come into its own."

The English and Scotch education boards are stressing not only the education of the mothers in caring for children of this pre-school period, but they plan also to extend the teaching in the schools of mothercraft to older girls who are important factors in the crowded home life.

In conclusion, the aspect of the situation which appealed most strongly to me in studying the actual working plans of the Local Government Boards of these countries was that no child hygiene organization can hope to carry on successfully an adequate national program unless it is supported or preferably led by a government actively engaged in public health and educational work; with the strength to create standards and to aid every community to carry them out. The establishment of the new Ministry of Health in Great Britain is but the logical conclusion of the splendid work of its Local Government Boards. The 1919 Ministry of Health Act provided for the immediate transfer to the Minister of Health of all the powers and duties of the Local Government Boards. It transferred also certain powers and duties of the Board of Education in relation to the medical supervision of children both of school age and of pre-school age. Other powers and duties in relation to health from other departments were also transferred to the Ministry of Health and provision was made for

(2) See p. 152.

Digitized by Google

the appointment of consultative councils, including both men and women, to give advice and assistance to the Minister on health questions. At last the health of a nation has become the work of a special department of the State having this one duty, with a vital national budget and an intimate relation through its councils with every local problem.

In this first year of the change of name of this American Child Hygiene Association is it not fitting that our aims should widen in scope? To prove the case of the pre-school child by an accurate accumulation of facts is a task large enough to satisfy this organization for a period and it is a case worth proving in our problem of public health. May I leave Sir Leslie Mackenzie's words with you as an inspiration?[2]

> "The case for the supervision of the pre-school child I have based on the discovered diseases and the disease rates, not on the deaths or the death rates. This I have done deliberately. The disease rates are a better index to problems than the death rates. Had we relied on the death rate to prove the case for medical inspection of school children we should still be attempting to prove it and failing; for the death rates at the school ages are the lowest of all. But the moment direct inspection revealed the tens of thousands of petty ailments and defects, not to speak of gross ailments and defects, the case for medical inspection of school children passed into the circle of accepted administrative duties. That is why in these studies I have put less emphasis on the mere deaths than on the concrete illustrations of the conditions of living. The child for the first five years of life is an organism so tender, so easily broken, so easily damaged, that it needs all the care that first-class intelligence can give it. That can be proved by the practical study of a single child. For the drift of life in the country as a whole, or in any great community, the massed quantities of the deaths and death rates are of immense value; but in the study of the individual child — and how to get the individual child is our whole problem — it is much more important to know how long he sleeps, how he feeds, whether his temperature goes above the normal, whether he catches cold readily, whether he has had any of the specific infections, what variety of microbes most readily attack him, whether he starts out of bed at night, whether he is housed in an over-crowded room, whether he shows the spontaneity natural to childhood, whether he is normal in his glands, bones, joints, skin, and senses — whether in sum he shows the rude healthiness of good nurture or the innumerable petty by-products of bad nurture. The death rate leads us up to these problems; it does not solve them. That is the business of detailed administration. That is why we ought to think rather of the positive conditions of life necessary to

(2) See p. 152.

Digitized by Google

keep healthy children always healthy than of the poverty stricken ideal that is satisfied if a child is not actually killed by bad feeding, or bad nursing or bad housing."

BIBLIOGRAPHY

1. Local Government Board, Maternity and Child Welfare Report on the Provisions made by Public Health Authorities and Voluntary Agencies in England and Wales, 1917, p. XV. His Majesty's Stationery Office, London. Price 6d. net.

2. Carnegie United Kingdom Trust Report on The Physical Welfare of Mothers and Children, (Scotland), by Sir W. Leslie Mackenzie, Medical Member of the Local Government Board for Scotland, 1917, pp. 164–183; 256–257; 269; 272–288. Sent on application to the Secretary of the Carnegie United Kingdom Trust, East Port, Dunfermline, Scotland.

3. U. S. Department of Labor, Children's Bureau, Standards of Child Welfare, 1919. Paper on British Organizations, by Sir Arthur Newsholme, p. 285.

4. The Local Government Board Report of the Medical Officer, Sir Arthur Newsholme, 1917–18.

5. National Health Magazine, No. 110, Vol. XI, p. 120, Sec. 3. 46 Bloomsbury Square, W. C. 1, London.

6. Chalmers, A. K., Medical Officer of Health, Glasgow; Maternity and Child Welfare Schemes, Glasgow Medical Journal, June 1917.

7. Newsholme, Sir Arthur; Enemies of Child Life, printed in The 19th Century and After magazine of January, 1918, p. 85. Leonard Scott Publishing Co., New York City.

8. Local Government Board Report by the Medical Officer, (Sir Arthur Newsholme), on Child Mortality at Ages 0 to 5 in England and Wales, 1915–16, p. 10.

Digitized by Google

OBSERVATIONS ON THE SUPERVISION OF THE PRE-SCHOOL AGE IN THE LARGE CITY

WALTER H. O. HOFFMANN, M. D., Chicago

In the infant welfare work with children up to two years, I had felt for years that it was a mistake to drop the work there, and to let the mothers drift without further guidance, particularly as it seems to have been proven that following the motto, "keep the well baby well," has brought a success reaching beyond our original hopes.

I realize that we are still far from our ideal; that is, to have all mothers nurse their babies. I believe that this is due to the fact that as yet we are unable to reach the mother before the baby is born, but with our intent to do pre-natal work on a large scale, we hope to overcome this difficulty. It is my impression that the "Children's Year" has been the main factor in bringing the idea of looking after the children of the pre-school age, to realization.

As in my opinion the adoption of a very simple feeding plan has been the main reason for success in infant welfare work, I have tried to develop a simple plan for the children from two to six. How far I have succeeded, I am unable to say as yet.

The Infant Welfare Society started in by opening one station for the older children in one of their regular stations, and ran it at the same hour. We were fortunate in getting the help of Miss Lydia Roberts of the Dietetic Department of the University of Chicago, and her coworkers. For several months we did more or less investigating and observation in this station simultaneously with work of a similar character, but extending to the age of fourteen, in Rush Medical College.

During this period Miss Roberts worked out a simple diet list which, if followed, gives the child sufficient protein, fat, carbohydrates, minerals and vitamines.

We used this period of investigation to prepare our medical and nursing staff for the work.

I believe it is fundamental in this kind of work to have the medical man realize what is wanted of him. The great difficulty is to get him away from the idea of disease and its treatment and to make him see his place in the supervision of nutrition, hygiene, et cetera. He must get a broader understanding of nutrition, particularly of the child's, than the average medical school education gives him. We proceeded

Digitized by Google

in two ways. First we gave the men the medical aspects of the question. Physiology, metabolism of the child, causes of malnutrition, the clinical picture of malnutrition, and defects which cause a particular child's undernourishment are the subjects on which we laid the greatest stress.

We then had a dietitian give the physicians a course with demonstrations on food values, on preparation of foods, and on the way in which a nutritious diet may be supplied with moderate means.

A similar course was given to the nurses, in fact most of the courses were attended by both doctors and nurses.

We did not stop with this broadening of the education of the graduated physician and nurse, but had the great opportunity, with the aid and the co-operation of the faculty of Rush Medical College, of opening besides the Infant Welfare clinic, a nutritional clinic for older children. In this way we were able to emphasize the importance of preventive medicine and educated the students in the supervision of the nutrition of the well child.

After a preparation of approximately six months, we started out on a larger scale, opening eight stations, and are supervising now 465 children.

For the work in the stations we employ physicians, dietitians and nurses. We found that it was not practical to run the nutrition clinic for older children at the same time as the Mothers' Conference for Babies, not only because the number was too big, but also because we had to have the undivided attention of the mother, focused on the one hand on the baby, and the other time on the older child.

The clinics are held once a week, some in the forenoon, some in the afternoon. Their duration is supposed to be two hours, but often this time has to be extended. The children who come to the clinic are first, those graduated at the end of the second year from the Infant Welfare Stations. Second, those sent by various agencies, who believe those children to be in need of supervision, and third, those sent by satisfied mothers.

The work in the stations is conducted in the following manner: After the child is registered, it is weighed and measured and is then taken to the physician who makes a thorough physical examination and inquiries into the hygiene, nutrition, et cetera in the home. If defects are found which are correctible, the mother's attention is called to them, and she is referred to her family physician, specialists, or organizations which take care of children thus afflicted. He notes negative and positive findings and records the weight graphically. The weight curve

Digitized by Google

thus made we find to be of great help in interesting the mothers. All children, those perfectly well, those who apparently have only a nutritional disturbance, and those with defects, are referred to the dietitian, who goes thoroughly into the diet of the child. By means of talks, practical demonstrations in the station, and later by follow-up visits to the home she helps the mother in the feeding of her children. As far as possible further follow-up visits to the home are made by the dietitian or nurse in those families where we have no immediate success.

At the next visit which we like to have after a week or two at the latest, the child is again weighed, looked over by a physician, and in case the gain is not satisfactory, a careful investigation is made from the medical viewpoint as well as from that of the dietitian, with the object of finding the cause of the failure. We have found that it is not possible to settle all the difficulties at the first contact with each case, and that repetition is necessary in most of the cases before the mother comes to understand what her child needs. Many prejudices and erroneous ideas have to be eradicated. We have to deal with so many different nationalities, each of which has its peculiar ideas which were useful and effective while living in their own countries, but which have often become a menace to the child's health under conditions greatly different from those under which they grew up. I do not believe that the time has come as yet when an Italian will give up his preference for macaroni, but I believe that it is possible by education gradually to bring about a more or less uniform diet for children which would be adapted to all, whatever the parent's nationality.

On further visits, which we try to make about twice a month, the same scheme is followed. So far we can say that the vast majority, 94 per cent of the mothers returned. The nutritional results are evidence by the fact that 75 per cent of the children have gained. Seventeen per cent had stationary weight and 8 per cent showed a loss.

Of the children examined, 87 per cent had defects, of which the most important were tonsils, 50 per cent; defective teeth, 25 per cent; rickets, 7 per cent; thyroid enlargement, 2 per cent. (Chicago lies in a goiter area.)

The hygienic conditions of the large city, the irregular and often insufficient income of the father are great factors which will have to be overcome in the best way possible.

Our work differs essentially from the work reported so far in literature in that we do not have a clinic or dispensary of our own at our disposal to which we can send children for correcting defects or for more accurate diagnosis. In other words, we have adopted the plan

Digitized by Google

which we use in our infant welfare work, of going as far as we can in making a diagnosis, by a physical examination at present without laboratory test. But when the physician feels that something ails the child outside of nutrition, he refers it to the proper agency. Our idea is first, that we are not intending to run the clinic for sick children, and secondly, we believe that it will not be right to persuade the mothers to bring their well children to such a clinic, just as we found that we were not able to do it with the babies. The other thing that distinguishes our plan from those that I have been able to read or hear about is that we take care of the well-nourished children as well as of those suffering from malnutrition. *I believe that the well child from two to six needs supervision just as much as does the baby, not only with regard to its nutrition, but also to bring about the earliest possible correction of those defects that so frequently arise in this period.* We feel that systematic work of this kind will do much towards reducing the death from infectious diseases.

Our motto from now on should be "Keep the well child well."

Digitized by Google

THE PERMANENT RESULTS OF CHILDREN'S YEAR FOR THE NEGLECTED PERIOD OF CHILDHOOD IN SAN FRANCISCO

ADELAIDE BROWN, M.D., San Francisco

The National Children's Year program in California received the endorsement of the State Board of Health and the California State Medical Society in 1918. In June, 1918, and April, 1919, 8,488 children in San Francisco were weighed and measured, and in addition a red rubber stamp on the national card emphasized these seven observations: Tonsils and Adenoids, Teeth, Posture, Nutrition, Eyes and Ears.

In addition to this list many further observations were made by the examiners, and the *idea of correctable defects* was impressed upon the mother by the nurse or lay worker who assisted at the examination, as well as by the doctor. We found that many times the mother does not understand a doctor, but on a second explanation by a nurse or lay worker the result of the examination is grasped.

The policy in San Francisco was to carry on the weighing and measuring drives at the centers where clinical or settlement work was already being done for children. Under this stimulation, teaching the mothers the value of a complete medical examination, the Well Baby Clinics and Runabout Clinics have grown vigorously during the year.

Five pre-natal Clinics are conducted in the city: two in connection with hospitals, one with a settlement and two in the University medical schools. An experiment is going on in the form of pre-natal lectures; two lectures covering pre-natal care with demonstrations of urinalyses, blood-pressure, pelvic measurements and weight curves. The third lecture covering the preparations for a confinement case in a private house for mother and child; the fourth, the baby's outfit, bath and bed, and the fifth the baby's day. These lectures are repeated each month on successive Tuesdays, and have been reported practically in full in the daily paper which reaches the working class. The attendance is small but sincere and interested and many women have completed the five lectures.

Follow up work has been carried on in the established clinical centers of the city, and the City and County Hospital has increased its facilities

Digitized by Google

for tonsil operations. The Children's Year Committee urged that careful instruction on tonsilectomy should be given in a short post-graduate course, with the opportunity to operate under direction, so that general surgeons throughout the state might be able to clear up the large number of abnormal tonsilar conditions which were found in Children's Year. This suggestion was not received with any enthusiasm by the Medical Schools. The University of California offered to pay a salary of a hundred dollars a month to a doctor who would do this work exclusively in the clinics. The privilege of learning to do the operation well has been extended in many hospitals to the internes, so that the post-graduate course may develop at some future time. A fund of $600 to be charged against at $2.50 a case is available for women physicians for tonsil operations. Dental clinics at the Dental College of the University of California, at the Municipal Clinics and Children's Hospital, correct some of the defects in teeth.

The infant welfare department, which, under the Board of Health, has *supervision of boarding out homes*, has had a second nurse added this year. The Board of Health is establishing, in cooperation with the Baby Hygiene Committee of the Association of Collegiate Alumnae, a health center in one of the more isolated districts of the city. This district contains about two thousand people and has a well established community center where the health center will be housed. The doctor in this district welcomes the children's center movement as being of use to him in caring for the community. We also hope to place a community nurse in this district, and to have a nutrition class from the neighboring school.

At the beginning of Children's Year we were urged by several welfare agencies in the state, to establish a California scale of growth and development in childhood, but when 26 per cent of the children under six years of age were either below height or weight as represented in the national scale, we decided that our defects rather than our attainments needed attention. A comment made recently by a school nurse is to me suggestive of the situation. She has for several years had charge of a public school in one of the best neighborhoods in the city, and claims she has practically no tonsil work or work on teeth among the children, and that as a whole they are vaccinated.

We are endeavoring to get the idea before mother's clubs and the Federation of Women's Clubs that an observation of the height and weight

Digitized by Google

of children is suggested by the National Educational Department and should be part of the medical examination in the public schools, and we are urging these clubs to furnish scales and means of measuring as part of their contribution to the school welfare.

In Oakland several school clinics are established to look out for the pre-school age and the Nutrition Class cases.

San Francisco presents an infant mortality in 1918 of 57.2 against 64 in 1917, and for the first nine months of 1919 the infant mortality has been 68. This reduction of deaths under one year of age in view of the ravages of influenza in our community was a great surprise to the Children's Year Committee, and must be attributed to the intensive work stimulated at every center of activity by the National Children's Year program.

The awakening of the mother to what a physical examination is and that it means "clothes off" was reflected in the criticism of a man who recently sent his child to a baby show which formed a part of the Land Show given each year in San Francisco, and was offended because no physical examination was given: "It was not worth the trouble of going unless a thorough examination was given the child." A beauty show did not attract them.

In several counties the cards of the Children's Year have formed the basis of follow up work on the defects. The children have been taken to hospitals for the removal of tonsils and adenoids and free dental work arranged for, as well as a weekly conference established for the continuation of the work of observing childhood.

A county nurse, and in many cases a town nurse in the largest town in the county, have been put to work. The education of the public health nurse is going on in a six months course in the University of California, and the Red Cross is urged to retard the demand for public health nurses until the graduates of this course are ready.

As a practical suggestion for future national work of the type of the Children's Year program, it has seemed to me that we might emphasize the weighing and measuring of the child under two years of age during the baby welfare week which has been staged by the National Federation of Women's Clubs for the last four years in March.

We could then urge the Children's Bureau to unite with the Bureau of Education in a nation-wide weighing and measuring of the child from

Digitized by Google

four to six years of age, with a view of having these children enter our public school system in the best possible physical health.

This drive for the pre-school age could be conducted in the months of July, August, or September, according as schools open in the various parts of the country. The children could be given a card passing them into the public school and an enormous amount of time saved to the public school examiners at the beginning of each term, the child starting with a health record. By having this examination cover the ages from four to six with stimulating newspaper editorials and national cooperation, the advantage of repeated examinations and the correction of defects, with a more and more accurate type of follow-up work given to childhood, a group of children far more creditable physically would enter our public schools; less retardation would occur with its extravagant waste of public money if the correctable defects were emphasized to the mothers by repeated free examination during the pre-school period, and particularly just as the child entered school.

DISCUSSION

Miss Winifred Rand, Supervisor, Baby Hygiene Association, Boston: Perhaps one reason why we have been so slow in waking up to the problem of the pre-school age, is the fact that Shakespeare did not recognize it in his Seven Ages of Man. You will remember he jumps from the infant to the school boy with his shining face, but at last we realize that the wealth of the nation lies in the children and it is absolutely obvious that it is up to us to take care of our children, and taking care of the children (as Dr. Lucas pointed out in his paper) does not mean just lowering the infant mortality. It means keeping children well. Dr. Clark also emphasized that fact. The children must be kept well. They must arrive at the doors of our schools in sound physical condition with round rosy cheeks. You are all familiar with the child who is brought into the out-patient department of the hospital or brought to a doctor's office by its mother who says, "Doctor, I want a tonic for my child, she has no appetite." She does not need a tonic. If one could give a tonic the problem would be quite simple, but giving a tonic does not solve the problem. It is because that child has not been properly taken care of that she does not eat enough. She has formed bad habits. This is the time when the pickle and ice cream cone habit is formed. It is the time when the child begins to drink tea or coffee at breakfast instead of milk. It is the time when the child is beginning to develop its own will about food, turning up its nose at milk, refusing to eat green vegetables and not liking oatmeal. Because this is the time when so much bad can be done, there is particular need for supervision of these children. It is interesting to realize that at the same time that this work which Dr. Hoffmann has told us about was being started in Chicago, it was also being started in Boston. When at the instigation of the child conservation committee, a state committee, which was formed dur-

Digitized by Google

ing the war for the consideration of the problem of child welfare, a survey was made in Boston of the conditions there, the thing that stared us in the face was the fact that nobody was looking after this "hitherto baby" which is what Hugh was called in "The Bird's Christmas Carol." You will remember that Hugh sat on the stairs and banged his head on the banisters feeling entirely unimportant, and that is the condition of most of the children of this age. They are the neglected part of the family. There is the little baby who has special attention and a special regime of life; there are the school children that must be gotten off to school in the morning and there are the wage earners; but this "hitherto baby" just comes along any old way; eats any old thing at any old time. The survey made in Boston showed this up so plainly that a settlement house offered the Baby Hygiene Association the use of their dietitian for a year if the Baby Hygiene Association would work out some plan for looking after these children. The result was that we started in that settlement house a child welfare conference, with a doctor in charge and a dietitian as his assistant rather than a nurse. I think the papers this afternoon have brought out the fact that this conference should not be just a nutritional conference. There is so much more involved than just the feeding of the child. That is extremely important, but it is only part of the problem. The physical examination of the child to ascertain the general condition is the basis of the work. This is the time to detect physical defects which may be corrected. The figures given show how many bad tonsils and adenoids there are. We so often talk about having tonsils and adenoids as though they were the wicked things, but, of course, it is the fact that so many are bad that we have to give them attention. This is the time when the first teeth begin to show signs of decay and this is the time to teach the use of the tooth brush. This is the time when children begin to stand badly and this is the time when all sorts of bad habits are formed. The Boston children's welfare conference considers the whole situation and is not just nutritional conference. It works from the basis of a physical examination by the physician, and the field work is carried on by dietitians trained for this special work. All dietitians, perhaps, are not quite ready for this work, but if schools of household economics will readjust their training, I believe we will have a valuable contribution to this work through the graduates of schools of household economics who can work under the direction of a doctor and who can be of great value as home visitors in these children's welfare conferences. The time is ripe, I believe, for this. A few years ago a teacher in the Brookline public schools had a note from one of her mothers. She had been giving her class a lesson in physiology, and this was the note: "Dear Teacher: — Please do not teach Maggie any more about her insides. It makes her nervous and besides it aint polite." That was the attitude a few years ago. Lay people did not want to know much about their insides. Now, it does not make them nervous, it is quite polite and we find our mothers are ready to know something about how to take care of their children. They are really eager to learn and understand, and we must teach.

Dr. Richard Smith, Boston: I want to say just a word about these defects, because it seems to me that there is a possibility of our running into error. There are at least three kinds of defects in these children which we ought to recognize.

Digitized by Google

First, there is the type of defect which may or may not have any great significance. When we find a list of the number of children who are defective, we are sometimes startled at the length of the list, but if we go into it in detail and see what those defects are, we find some of them are deviated septums or some other trivial things which perhaps do not in any way materially interfere with the child's development. Then there are other defects dependent not upon any condition then existing, but dependent upon the conditions which have existed previously, largely questions of bad feeding. We can never correct these defects by doing something at that time. The only way to prevent these defects is by going back and seeing where we have made mistakes in infant welfare work. Every child discovered at the age of two with rickets means something has gone wrong previously in that child's history. Now, if we are going to correct or if we are going to prevent the defects in many of these children we shall have to do something different with the children up to two years. Then there is a third class of defects which need correction — obvious things such as bad teeth or diseased tonsils. For many years we contented ourselves with listing defects in school children and doing nothing about them. I hope we will not make the same mistake with reference to children of pre-school age. If we are just going to go on for ten or fifteen years listing correctable defects and can't correct them we will just be repeating our previous mistakes. While we are creating machinery for detecting mistakes, we must at the same time devise methods for correcting them. We have got to see that there are enough dental clinics to take care of these bad teeth and that tonsils that are diseased are removed.

Dr. Henry F. Helmholz, Chicago: I should like to call attention particularly to the teeth. It was a surprise to me at the conference in Washington last year to hear that "investigations have shown that something like 20 per cent of all the teeth of school children are in a more or less serious state of decay," and that "approximately one child in a hundred at any one time in an ordinary school has an ulcerated tooth." * It seems to me that the time has come when we have to interest the dentists in this preventive work. I am sure they will be only too willing to co-operate with us and the experience we have had in Evanston in interesting the dentists can be duplicated, I think, elsewhere. The subject was brought up at one of their monthly meetings and they volunteered to set aside one day each week, one man to give his entire time for a day each week, to the cases that were referred from our infant welfare stations.

Dr. Joseph S. Wall, Washington: I want to second what Dr. Helmholz has said, and yet I do it from a different angle. I had an opportunity recently in looking up some work to find quite a number of articles written by dentists on the care of children's teeth, but a dearth of articles written by physicians on the care of children's teeth. This particular pre-school age is just the age in which the child's teeth are assigned to the physician and not assigned to the dentist so I think we had better educate our own members as well as the members of the dental fraternity to look into this particular subject. Just one other point, and that is

* Dental clinics. Terman. Standards of Child Welfare Children's Bureau Publication, NO. 6o, 1919.

Digitized by Google

that twice to-day the value of charts or record forms has been emphasized, and I would like to direct your attention to the record forms for prenatal care and for infant care that have been published by the Association, and to the record forms covering that period of infancy and pre-school age, that are in the course of preparation by the Committee on Record Forms. Until some other record is adopted, I hope everyone will use these record forms.

Dr. H. J. Gerstenberger, Cleveland: This whole public health problem resolves itself in the last analysis into an economic one, and the place that we give to any individual movement towards the protection of human life should depend upon its effect on the net economic result. It has been known for a long while that the child from two to six has been neglected. Care of the child of pre-school age has been on paper in the plans for many institutions, but it has not been carried out extensively simply because there have not been adequate funds at hand. I know that has been the case at home. We have not had sufficient funds to care adequately for the infants under one year. Now I agree with Dr. Lucas that we must watch not only mortality statistics, but must focus our attention on morbidity statistics, except that I should not like to let that mean that the morbidity statistics are more valuable than the mortality statistics. We may have high mortality statistics, and also high morbidity statistics, and we may have low mortality statistics and at the same time we may have high morbidity statistics, but whatever knowledge we may have we will have to apply our remedial measures at the point where we lose the greatest number of lives and that is during the first year. Therefore, until we get adequate funds we will still have to concentrate on the first two years of life, without of course, neglecting entirely the second period but nevertheless without concentrating too much on the second period until we get enough money to take care of the infants under two years. Then as to the dental defects that are discovered in the children from two to five. I firmly believe that the biggest percentage are due to faulty care during the first two years and especially the first year and I believe that that applies to caries, especially. If we can prevent rickets and scurvy, we will do more good than by applying tooth brushes. I believe that the tooth brush drill has very little to do with prevention of caries; the prevention of rickets and scurvy does a great deal more.

Dr. Henry L. K. Shaw, Albany: .I would like to know what success clinics in other cities have in getting the dentists to do this work. We have a school for mothers in which we opened a dental clinic and were not able to get the free services of any dentist. In the public schools they have one dental clinic and the dentist gives only two afternoons a week to that work and we have about fifteen thousand children in Albany. I wish some one would suggest how we can arouse the interest of the dentist. Sometimes when I refer children to the dentist to have their first teeth taken care of they come back and say the dentist refuses to do anything because they are the first teeth. Now the dentists themselves need education along that line. I had my attention called recently to an article in one of the leading journals in dentistry on the relation of teeth to the general nutrition. The author was a practicing dentist, but emphasized the use of proper diet for children. I think this ought to be read by physicians as well as by dentists.

Digitized by Google

Dr. Karl G. Leo-Wolf, Buffalo: Mr. Chairman, you will pardon me if I refer once more to the discussion of this morning, but I do not believe we should sit here and listen complacently to a report of 50 per cent of adenoids and tonsils from Chicago; 46 per cent in San Francisco. That means that something is wrong and that we are the fellows that need the tonic and not the little children. Is it not important to find out why there is that tremendous percentage, or do we have to look forward to the time when every child entering school has to bring a certificate that its tonsils and adenoids were removed as well as that it was vaccinated.

Dr. McGuire Newton, Richmond: Dr. Shaw spoke of the difficulty of getting dentists to do this work. I wish to report that in Richmond the dental association, has agreed, by resolution, to care for all children without cost, who are referred to them by the visiting nurses or the public schools.

Dr. Ada E. Schweitzer, Chief, Division of Child Hygiene, State Department of Health, Indianapolis: Our State Dental Society met in Indianapolis this spring, and I thought it might be advisable to know what the dentists themselves had to say about standards of dental care for children. So we prepared a list of things that we wanted to know and presented that to the dental society. We also asked them their sentiment with regard to doing free dental work. They went on record as saying that in any competent society in the state wherever dentists belonging to that society were asked to devote certain hours each week to free dental work for children that they would be willing to do it. They also appointed a committee to confer with the division of child hygiene in the state board of health and a committee to establish dental standards for children's work. We included in the questions that we asked, nutritional standards for children because we felt that many poor teeth are due to faulty nutrition in early life. We also included the care that should be given to the child's mouth from the prophylactic standpoint and the care that should be given to defective teeth. This was asked for different ages from the time the teeth erupt on through to adult life, so that we are to get standards for care of that kind for all ages.

The editor of the National Dental Society was there and asked for a copy of this request. I do not know whether it was taken up at the national meeting or not, but it is being considered by a national dental committee that has charge of propaganda.

Mr. Frederick S. Crum, Newark: I should like to make just a very brief plea for more careful statements of facts which are at best very hard to get, but once gotten they should be expressed more accurately. At a recent exhibit in New Orleans on tuberculosis, this statement was made — "The *death rate* from tuberculosis in the United States is one hundred fifty thousand per year. The *death rate* from tuberculosis in the world is one million ninety-five thousand per year." In a technical bulletin very recently I saw the statement that the death rate in the United States during 1917 was over 14.2 *per cent per* 1000 of population. Of course, that expression is meaningless.

Dr. Waldron, Yonkers: In connection with one of our hospitals, certain dentists have agreed to give their services for certain days in the week, taking turns. We

Digitized by Google

have a very large dental clinic there to which the school nurses bring the children who need care.

A Delegate: This pre-school period is a very important one in child life, but there are some things or faults that have not been mentioned. And one of them is the clothing subject.

Dr. I. W. Faison, Charlotte, N. C.: And as long as the fashion plate in the United States is the supreme boss of women of the United States we are not going to have children dressed right, because they won't half dress themselves right. You may see a woman come along with a fur coat on and her gloves and her rubbers on and a four-year-old boy with his knees bare, cold lips, purple face, comes home with sick stomach and sore throat, and the mother is ignorant enough to tell the doctor she does not know what made her baby sick. In the teeth business the doctors and the dentists have got to be taught a new lesson, the way I look at it. We have dentists in our town that promise to do anything you want them to but when you take a child to them with an abscess at the root of a tooth they say they can't take it out and won't take it out because it would ruin the arch of the mouth. The dentist that has not got any more sense than to say that ought to have his license taken away from him.

Dr. G. P. Barth, Milwaukee: Mr. President, in looking over the situation in our city we found it was not so much that we did not have sufficient information, that we did not make enough examinations, that we did not follow the families and their children closely enough, but that all the information was in the separate archives of the various organizations and societies, that it was not available to other societies who were following the child in other matters — let us say, health supervision of school children. So we have started in Milwaukee a record in which we gather the entire history of the family and every member thereof from before the birth of the child through the seventeenth year of that child when it no longer must work under permit. In that way we hope to eliminate a great deal of overlapping and a great deal of repetition in examinations, treatment and advice given. Just how far we are going to succeed in eliminating these repetitions we cannot tell at present, but I think in establishing this family card in a central bureau we are going to get a great deal of valuable information and going to succeed in giving the needed help for not only the mother in the prenatal period, but the child in infancy, the pre-school age, the school age, and in the working age of the child.

Dr. J. Morton Howell, Dayton, Ohio: I know of no branch of medical science which in the past decade has made greater strides in the forward and upward movement than the one to which this society devotes its time and attention, to-wit, child hygiene.

I remember distinctly ten years ago, when as president of the first real board of health, Dayton, ever had, the awful condition in which I found things, on assuming this position of trust, and the strenuous and at the same time thankless task of working out a solution to the difficult problems which would inure forever to the betterment of the people for all the time to come.

Digitized by Google

Briefly let me outline a few of the more prominent assets and liabilities of this old organization as we found it existing at that time.

Parenthetically, let me say I think it a good average of the hygienic conditions then prevailing in most of the municipalities throughout all the states.

First, the so-called health board was vested in the hands of three men whose duty it was to take care of all phases of municipal work and measures, known as the "Board of City Affairs." It can better be imagined than told in this brief statement the neglect which obtained along sanitary and hygienic lines.

They had a health officer whom they were paying the munificent sum of $900 a year, and, of course, he was given the privilege of devoting as much time as he desired to private practice. This distinguished practitioner was given as his aids two sanitary police who had been selected with special reference to their ability to secure votes in their respective wards.

Their laboratory consisted of an old second-hand microscope and three test tubes, two of which were broken. No inspection of schools, dairies, abattoirs, public markets, etc., except that which was made by those two ward heelers.

We now have medical inspection of schools — chief medical inspector receiving $4,000 per year; a health officer devoting all his time and receiving $4,000 per year, with five paid medical men as his assistants, a corps of sanitary police and trained nurses.

We have certified and inspected milk, besides the strictest laws — well executed — governing all milk delivered to every home throughout the city. I could go on ad infinitum as to changes throughout the city as well as the commonwealth of Ohio along these sanitary lines during this brief space of time.

Permit me to say in closing that I know of no other force or organization in the country equal to the American Child Hygiene Association for the furtherance and development of these very essential activities and problems. Particularly, will this be true, if every member of this organization in question put his shoulder to the wheel to the end that the new program in all its varied interests and forms is fully carried out, both in letter and in spirit.

Dr. Taliaferro Clark, U. S. P. H. Service, Washington: I feel that we should not close this discussion and allow you to take away with you the thought that the care of the child of pre-school age revolves itself in a question of care of teeth. I think there is something that goes deeper than the root of a tooth in this problem of the child of pre-school age. Therefore, I wish to compliment Dr. Smith on his very intelligent conception of three types of defects which we might expect to find among children of this age group. His remarks have a distinct bearing on a fact which I have tried to emphasize more than once in public meetings, namely, the interrelation of all the problems of health conservation. In the first place, the child of the pre-school age should have a sound birth-right. To this end, all the things which are being done for the betterment of the physical and mental health of the men and women of this country should be reflected in more healthy infants and children of the pre-school age. As the great problems of disease control are solved, such as malaria, the venereal diseases, tuberculosis, children will be born with greater vital stamina who will be able to pass through the period of pre-school age

Digitized by Google

with greater powers of resistance to infection and in better physical condition. The work of this society exhibits this interrelation very beautifully, beginning with emphasis on prenatal care, the care of the infant and of the child of pre-school age. It has now been extended to include the school child and the adolescence period. Dr. Smith has aptly said, as we solve the problem of prenatal care we will bring the child to pre-school age in better physical condition. Likewise in such measure as we are successful in our efforts at conserving the health of the child during the pre-school period, he will enter the school and adolescent period in better physical and mental condition.

Dr. M. E. Brydon, Richmond: I want to ask a question about the records. In our program for next spring in our child welfare bureau we are starting on conferences for children of this age. I have looked over a good many records from other places and so many of them have measurements of the head. Is that necessary? I mean is it of practical value to put it into an examination of this sort at this time.

I also want to ask for suggestions as to where these records should be kept? I want to have the work done in each county. Now, if we organize each county and have all these children examined in the county, where is the best place for the records to be kept?

The Chairman: Is there any further discussion? There is one thing I would like to bring out before I ask the leaders to close the discussion. That is, if you will look over our program you will see that we have a session on Nursing and Social Work, and we have a session on Infant Care and Prenatal and Maternal Care, etc. In other words, when we look at these subjects we look at them as separate subjects but they are not separate at all. You cannot cubbyhole a child before it is born under prenatal, cubbyhole another child in the infant section, cubbyhole another child in the pre-school age and so on until he is drafted in the army. The ideal is quite different. A record should be started on the child as soon as the child is known to be alive. That record should follow the child from one society, if need be, to another until the child goes to school. That same record should be passed along to the school physician, and when the child graduates from school be available for the Government in any time of emergency such as we have just been through. Something of that sort is done in Scotland — I do not know to what age it goes. There is a great waste of effort and a great duplication of work from the very fact that this is not generally done. How easy it would be to do it if we would play into each others hands as we might very well do. The pre-school age, of course, is a very important subject and the discussions have brought out most of the factors which ought to be considered. The discussion has brought out very clearly to me one fact which I think is rather deplorable and that is how little actual work has been done on this pre-school age. It is quite natural, because the highest mortality was in the infant age and the greatest influence on the early life of the child was obtained through the prenatal period. But now those are being well studied and well taken care of and now we hope to get the same interest and results from the pre-school age where perhaps we won't save lives as often but we certainly will save

Digitized by Google

suffering, and there is nothing that takes more from the joy of the home and the joy of life so much as illness and suffering.

Dr. S. McC. Hamill, Philadelphia: May I say just a word? It is simply in support of the statements made by Dr. Talbot, and to mention a place in which the continued supervision is carried out, I think possibly, to the best advantage of any place in the world. That is in the Borough of Willisdene, just out of London, in which the prenatal care work, the care of the infant, of the child of pre-school age and the school child are all under the jurisdiction of the department of health. The records are continuous and are turned over to the school when the child reaches school age.

Dr. Howard Childs Carpenter, Philadelphia: It seems to me we have brought the hospital too seldom into this discussion. Many children's hospitals, I think, fall short of their responsibility in the prevention of disease by caring only for the sick child. In their dispensaries they give dietetic advice for the young child while he is sick, but as soon as he has recovered from his temporary illness, he is permitted to drift away, and all too frequently comes back after a number of months with rickets, malnutrition, or some other preventable disease. It is true that there are a few hospitals in this country now conducting health clinics for well children, but I feel most strongly that every hospital treating babies and children should conduct a health clinic where supposedly well children can be brought for examination and advice on matters of hygiene, and I further believe that hospitals are better equipped for this work than other institutions, such as infant welfare centers, health stations, etc. Take, for instance, the prevention of communicable diseases such as diphtheria. How many hospital clinics are there in this country that endeavor to have the well children in their vicinity brought to the hospital to be tested for Shick reaction, and then immunized permanently if discovered to be without a natural protection to diphtheria, which is so frequently the case with the child of pre-school age.

Dr. Walter H. O. Hoffmann, Chicago: I would like to say a few words about keeping records. If anybody keeps records by the thousands for over two years, he is going to get into trouble with the people from whom he rents the room, because the records are going to break through the floors into the cellar. Simply piling up records does no one any good.

It is interesting to see how each person brings out his own little hobby. But in this way we learn. My hobby is teaching students, so I naturally read papers about the educational part. I wonder if it would not be a good idea, in place of reading papers here, to print them first and hand them to everybody and have nothing but discussions at the meetings. This was my first attempt at actually reading a paper, and I noticed that it was only the paragraph on the teeth that brought out the most of the discussion.

Another thing, I think, we ought to consider is this. If a man works in any one branch he is apt to overlook others. I think we ought to find men with big enough brains to direct our work so that we may have better correlation of the different branches. I believe that this society should have a committee to send suggestions to men who do work.

Digitized by Google

SCHOOL AGE AND ADOLESCENCE

COMMITTEE

Dr. Taliaferro Clark, Assistant Surgeon General, U. S. Public Health Service, Washington, D. C., *Chairman*

Dr. W. S. Rankin, Secretary, State Board of Health, Raleigh, N. C.

Dr. E. A. Peterson, Board of Education, Cleveland

Dr. Thomas A. Storey, Interdepartmental Social Hygiene Board, Washington, D. C.

Dr. Lydia Allen Devilbiss, U. S. P. H. Service, Washington

Digitized by Google

Digitized by Google

INTRODUCTION BY THE CHAIRMAN

TALIAFERRO CLARK, M. D., Washington, D. C.

Ladies and gentlemen.— You have watched the evolution of this Association and the enlargement of the scope of its activities which has resulted in the establishment of this section which deals with children of school age and adolescence. The relationship of this activity to that of the other forms of child welfare work of the Association is very apparent.

The number of physical defects, the number of cases of malnutrition, the number of cases of feeble-mindedness which we encounter in schools is an index of the thoroughness of the supervision exercised during the age periods previous to the entrance into school. My conception of school hygiene, however, is not primarily the detection and correction of remedial defects, but the placing of the normal child in an environment and under such supervision best suited to his complete physical and mental development. Any program for school hygiene or health supervision of the school child must take into consideration the physical surroundings of the child, must place the child in the best possible sanitary environment during the course of its school life. It must, by reason of the incompleteness of the work done previous to school age, provide for the seeking out and correction of the remedial defects which hamper the child and prevent it from taking full advantage of the educational opportunities, but in addition must include measures for preventing the occurrence of defects during the course of his school life.

Furthermore, we must not remain content with a solution of the problem of physical defects, but must see that the child develops mentally in as satisfactory a manner as he does physically. Intelligent health supervision of the school child should take into consideration the mental development of the child. The detection of mental abnormalities and the giving of advice as to their bearing on educational effort will be of as great help, if not even greater help to the educator as the detection and correction of hampering physical defects. For this reason we have included in this program as one of the first things to be considered a discussion of the mental aspects of school hygiene.

I will now call on Passed Assistant Surgeon Walter L. Treadway of the U. S. Public Health Service, who will present a paper on Psychiatry, with special reference to children of school age.

Digitized by Google

PSYCHIATRY WITH SPECIAL REFERENCE TO CHILDREN OF SCHOOL AGE.

W. L. TREADWAY,

P. A. Surgeon, U .S. Public Health Service, Washington

Psychiatry, or the understanding of abnormal mental reactions, stands in very definite relationship to the causes, cure and prevention of mental diseases. It is important, not only because of the serious death toll resulting from such disorders, but also because of the economic inefficiency resulting in the inability of a number of individuals suffering from even mild types to adjust themselves properly to the more or less complex situations in life. Furthermore, such individuals are in frequent conflict with the customs and conventions of society. Reports of crimes and misdemeanors committed by them convey a very definite meaning to those who are familiar with the abnormalities of conduct of persons suffering from mental diseases. The frequency of such occurences is a reliable index of the magnitude of one phase of the mental hygiene problem. Recent studies conducted by the Public Health Service of the mental condition of a large group of American school children and inmates of private and State schools for the reformation of juvenile delinquents have demonstrated that numbers of them are under average in mental development or suffer from some form of psychic disturbance.

Because school constitutes so important a period in the development of a child's personality and because the dominant symptoms of a number of well-recognized types of mental disorders may be considered as perversions of certain traits of character common to all children, teachers, medical inspectors of schools, and others concerned with child hygiene problems should learn to recognize faulty traits of character in developing children. It must ever be borne in mind that the composite of all traits of character exhibited by an individual constitutes personality, and this is determined not only by heredity but by the impress of all the extrinsic factors that influence physical and mental growth and development. The recognition of the influence of these factors furnishes the key to the preventive measures which constitute the modern program in mental hygiene. The training given a child

Digitized by Google

during infancy and the pre-school age, his environment, his associations, his fears, his likes and dislikes, the amount of rest and play, and the occurrence of disease all enter into the development of his personality. Although these influences are probably beyond conscious recall, nevertheless they are reflected by his mental adjustments of later life.

When the child reaches school age, the so-called pre-adolescent stage of development, his character is beginning to manifest itself. It is at this time that the opportunity of all others presents itself for the building of a sound character for future men and women, because faulty traits of personality, which may be corrected in their incipiency, if neglected tend in later life to become crystallized into habit. In order to impart this training, however, those concerned with the welfare of children should become familiar with the significance of certain childish tendencies and their role in this development of undesirable traits of character. It may be well, therefore, to describe a number of childish traits that are frequently observed and trace their molding into undesirable habits of thought and actions through failure of those responsible for the child to properly interpret their significance.

Those concerned with the welfare of children should ever bear in mind that the impulsiveness and ever-changing activity of a number of so-called fidgety children are but symptoms of mental fatigue. Normal children are active, impulsive and inquisitive. This is nature's method of education, and children, therefore, should be allowed to exercise these mental traits. Rigid discipline tends to curb natural activities which then seek outlets in other more or less roundabout ways. For example, too rigid discipline tends to cause the harboring of resentment against and disregard for those in authority. When once discipline is relaxed the child, having failed to learn to control his impulses, frequently finds himself in difficult and compromising situations.

Disciplinary measures should follow the form of substituting desirable activities for undesirable ones. To do this effectively those responsible for the welfare of the child, besides having an understanding of personality, should be able, by the exercise of tact and judgment, to secure attention and discipline without apparent effort and without the knowledge of the child. This is especially important when the impulsiveness and activity of the child are so marked as to attract attention.

Digitized by Google

Children normally concentrate on the thing at hand, but under the artificial restraints of school life they may lose the ability and desire to do this and become unstable in the direction of their activities. The evidence of fatigue must be watched for and prevented by assigning short tasks that should always be carried to completion and these followed by short periods of relaxation. The tasks should be gradually lengthened, commensurate with the development of the child and made more difficult; otherwise the changing activities symptomatic of fatigue will become crystallized into an unstable personality characterized by faulty thought and aimless purpose. In other words, the natural concentration exhibited by the child should be encouraged and his normal activities should be wisely directed toward useful ends.

A child who has already developed a faulty habit in this respect should be trained so as to be less easily distracted and his natural ability to concentrate should be strengthened by directing his energies along productive lines. Failure to do this will allow the habit to become fixed because of the unconscious tendency of such a child to find an outlet for his excessive energy along the path of least resistance. This leads to an inability to adjust himself to the normal routine of life in later years.

The neglect of these simple principles in training tend to induce and encourage traits of personality that are characterized by impulsiveness, an ever-changing and over-activity that is recognized as being slightly abnormal. In those slightly abnormal or unstable individuals the tendency to a frank outcrop of insanity known as the manic-depressive psychosis appears, in the light of past experience, a plausible result.

During recent studies a number of children have been frequently encountered who at home exhibit a marked attachment for either father or mother and as a result the child is seldom subjected to disciplinary measures. In school, children of this type often show a like fondness for the teacher or for older children and are made jealous by the attentions of their favorites to other children. In a number of instances such attachments are but a manifestation of the spirit of selfishness and self-aggrandizement. These children are frequently arrogant and cruel to their playmates and are disliked by them. It is a well observed fact that the crystallization of these traits of character ultimately result in the development of an egotistic personality and

Digitized by Google

indeed have long been termed by some authorities as the epileptic temperament.

Those responsible for the child's welfare should therefore exercise great care to prevent the development of unusual attachments by children at school and substitute for this tendency a desire for normal conduct in respect to their fellow pupils. They should carefully avoid making pets of them and endeavor to teach them to subordinate their own likes and dislikes in proper degree as relating to other children, and to realize that others are entitled to as much consideration as themselves. In the case of a number of such children, neglect of this precaution will result in abnormal mental reactions in later life which will be sources of much unhappiness, discouragement and difficult adjustment to social and economic requirements.

It is a well-known fact that children are naturally imaginative. Their fancies are many and varied and serve a proper role in the intellectual and emotional development. Unfortunately, the fancies may assume an improper trend fraught with serious consequences. This fact is brought out when it is recalled that children as a rule do not harbor resentment, but naturally attempt to settle their quarrels by argument. On the other hand, a number of children do harbor resentment when their power of self-assertion has been stunted through following the lines of least resistance in the settlement of childish disputes and discords instead of meeting them frankly and squarely. The children of this type are given to so-called day dreams and reflections over supposed wrongs. They weave fancies about supposititious injuries which give a species of satisfaction and contentment. These fancies, unless properly directed, ultimately become fixed habits of thought which make for poor mental adjustment in later life. For this reason any system of training children should take into consideration their imaginative faculties and the tendency to build air castles and weave fancies. When properly controlled these are healthy substitutes for the whimsical and capricious longings of childhood that may ultimately result in mental maladjustment. For this reason the real or fancied wrongs of children should be settled without delay, the discomforts and discords should be smoothed to the satisfaction of the child and he should be encouraged to make confession of his feelings and desires.

Although children suffer a natural degree of shyness and a certain timidity during the formation of an acquaintanceship it is usual for

Digitized by Google

them to adjust their relations with other children for themselves. When the natural desire of children for social intercourse is not encouraged or is undeveloped other children will tease them and torment them, if allowed to do so, or will have nothing to do with them. If a child is able to assert his rights he is taken into the field by common consent and becomes a part of the flock. If, however, he is not encouraged to overcome shyness and timidity and to assert himself these faulty traits of character become more and more marked. The child becomes seclusive largely because of the greater opportunity afforded him to weave fancies about his insufferable lot. Later in life the habit of introspection thus formed serves as a mental pitfall.

The wise teacher or parent should note seclusiveness in children and the tendency of other children to leave them to this fate. If the true meaning of this is not understood, and if through sympathy he is by mistake adopted, as it were, as a protege, the child soon looks upon the protector as a substitute for his own shortcomings. The tendency to indulge in reflections over his supposed wrongs is therefore encouraged. Dependence in this respect will increase with advancing age until it becomes a fixed habit of infantile tendencies.

When the child has reached the period of adolescense these traits have become crystallized into a personality which has been termed the "shut-in" type. There is no longer any question that the shut-in type of personality serves in the genesis of a chronic mental disorder known as dementia praecox. In the prevention of this type of warped personality the child's regime, including play, should be so adjusted that other children will recognize the needs of these unfortunate ones and encourage them to take their place among others, thereby developing the stunted social traits so that they may eventually exercise a desirable degree of self-assertion.

Those interested in the welfare of children should begin to appreciate the importance of recognizing faulty traits of character that may eventually result in the development of anti-social tendencies in after years. In the understanding of the development of these traits of character, a knowledge of the child's heredity, environment, educational opportunities should be had, in addition thereto, one should have an understanding of his grasp of general and school knowledge, his efforts or energy output, and in fact, an understanding of his whole personality and development, mental history as well as physical.

Digitized by Google

Such knowledge is important from a standpoint of understanding traits of character that make for good or bad adaptation to the more or less complex situations of life.

This article has dealt only with the traits of personalty which relate to the individual's energy output, his estimate of himself and his ability to bring himself into harmonious relations with the thoughts and pursuits of others. These traits are after all those of native endowment, which, when properly developed, make for a well-balanced personality.

During the past few years earnest efforts have been expended in the study of these traits of character, efforts which have pointed the way to a better understanding of the development of mental disorders in after life. The continuation of these studies and the recognition of potential anti-social traits in developing children means the dawn of a new preventive medicine.

DISCUSSION

The Chairman: Ladies and gentlemen, the discussion will be opened by Dr. Paul V. Anderson, of Richmond.

Dr. Anderson: Dr. Treadway's paper is immensely well worth while. Preventive medicine until the present time has dealt with those diseases which kill, and but little has been done for those diseases, mental disorders, which do not kill, but which main and mar, and make life unbearable. I was especially struck by what Dr. Treadway said concerning dementia praecox. Before studying medicine I taught boys, and had I known the early symptoms of dementia praecox then, as I know them now, I feel confident that I could have saved some of the boys under my care at that time, who later developed this disease and were my patients. In the study of cases of dementia praecox, I have been struck by the fact that many cases developing this trouble, as children, were not defective, but rather peculiar, different from other children, and did not have "healthy mental habits which would have formed a sound balancing influence in their conflicts." Some of these cases were dull, but many were abnormally precocious, and were like straw fires: there was a brief flash and all was over. Many were seclusive, reticent, shy and excessively sensitive. They avoided games, especially rough school games. They did not have chums, as do normal children. Many read a great deal, especially the Bible; were excessively religious — conscientious to a fault, and were dreamers. Finally they developed a tendency to substitute for an efficient way of meeting difficulties a superficial moralizing and self-deception.

Puberty is a crucial time in the life of a child. At this time he dreams dreams and sees visions; is moody and broods; restraints are set aside; he is taciturn, introspective and self-sufficient; self-esteem and self-criticism are marked. This

Digitized by Google

instability, occurring as it does, coincidentally with the stress of school life, is dangerous, and the combined demands on the physician and mental strength, especially in girls, are frequently so great that a mental break-down occurs. It is especially important that the physician, the teacher and the parents should lend a helping hand at this time. The sexual mystery should be explained in order to prevent the vague surmisings — the doubts and fears so prevalent at this time.

Children, of course, first of all, should be made as nearly perfect physically as possible, but the guiding and controlling of the body are not to be neglected. Introspection and brooding should be discouraged; self-control and self-reliance should be taught; the play instinct should be cultivated, and games which require decisive action should be played. Children should be taught to do things, rather than to think of doing things.

I regret that time prevents my discussing the other important points brought out in Dr. Treadway's excellent paper.

Dr. L. T. Royster, Norfolk, Va.: Having been at the head of a rather large educational system for a number of years, and being a pediatrist, there appears to me to be a striking anology between the physical and the mental in a way that we all recognize, in what Dr. Treadway has said, but the underlying principles have not been brought out specifically.

As has been emphasized on this floor in the past few days, without an appreciation of the underlying chemical principles which go to make up the digestion of infants' food in assimilation into the body, so we must realize that underlying principle in the relation of mentality to physical make-up. If we recognize what is perhaps at present a hypothetical argument, that there is a series or a set of entities in our body which we might term "cell determiners," for the lack of a better word, and if we recognize the fact that there is a certain number of cell determiners for good and for bad in each individual, then the balance of education comes to be one of development and repression at the same time.

The great public school system of this country which is the best for the present, which suits the needs of all, is lacking in that one particular thing that I cannot individualize but here is the thing I want to say. There is no such thing as a method of education any more than there is a method of infant feeding. Every child is a law mentally unto itself, just as every child is physically a law unto itself, and when a teacher goes into the class and handles those thirty or forty pupils, all in the same way she is obliged to fail. It is not her fault. It is the fault of the public school system, also that system which attempts to allow the child the natural bent without suppression, is obliged to fail. Now, there is a volume of repression and development. We develop the good traits in our character at the expense of bad ones, putting the bad ones into a dormant or latent state which is a system of repression.

Dr. Ellen Stone, Providence: I feel that Dr. Treadway's paper clearly shows that any department dealing with medical inspection of school children should have on its staff a good psychiatrist to examine all abnormal, backward and difficult children, to make recommendations in regard to them and to refer them to special classes. We have had such a psychiatrist in the Providence Department of Health

Digitized by Google

for several years and found him of inestimable value, and the school committee has also seen his value and appointed special teachers for these children and a supervisor of special classes. I think the regular medical inspector cannot accurately diagnose these children and the examination should be made by a psychiatrist.

Chairman: I am glad to know that Providence is appreciating the necessity of having a psychiatrist to conduct the examinations. It is an excellent thing. I am glad to see that Providence is awake.

Dr. Smart, Baltimore: Dealing especially with the adult mental troubles and looking over my cases I see that there is one trait that has been brought up from childhood — that is the element of fear. Fear always plays a prominent part in the child's life, dependent upon its training. Children are told, "Don't do this, and don't do that." It starts the child to develop the psychological element that is born in us, manifested by the first man, Adam. Then, I have often been struck by the question that was put to Oliver Wendell Holmes when someone wrote him asking at what age a child should be trained. His reply was, "One hundred years before birth."

We cannot commence too young with the children. It is not only the training of the child that should be considered but the training of the parents to prevent them from saying, "Don't, don't, don't." Instead of that, the child should be led by suggestion to something that is better and more pleasing. I want to lay the emphasis on the word "fear." I see it in the case histories. The majority of our mental cases are based upon fear of some sort.

Dr. Louis F. Bisch, Asheville: Dr. Treadway's paper is most valuable and timely and I think no one can take any exception to anything said therein. We are coming to realize that we are as normal as we are in spite of our parents and in spite of our teachers and the training that we receive. We are also coming to realize that the body and mind act as a unit and are not two separate entities, acting in opposing ways, as some would seem to think. We have laid too much stress upon purely physical things and have neglected psychological and psychiatric factors. I believe that what we should do, of course, as has been emphasized, is to teach the teachers and to teach the mothers to be on the alert for these little vagaries of character, peculiar types of personality, etc., that may be the forerunners of grave mental disturbance in later life. But we must be careful of one thing and that is that this enthusiasm which seems to be becoming more and more widespread throughout the country will not act as a boomerang and tend to react back upon us. I mean that there are too many persons who after a short course or period of observation in an asylum or hospital for the insane, or university lecture course, are going out and posing as expert psychologists and psychiatrists. They are doing a very dangerous work inasmuch as they are diagnosing cases by the wholesale method and are losing sight of the one big thing, the question of individualism. These people in the end are going to do a movement of this kind more harm than good.

Dr. Florence B. Sherbon, Division of Child Hygiene, State Department of Health, Topeka, Kansas: I think nothing has come into my experience in recent years which has so suddenly widened my mental horizon and illuminated my previous con-

Digitized by Google

fusions as did the reading of Crile's report of recent medical biological research in his book, "Man, An Adaptive Mechanism." We have always said, "I was so angry I was positively sick," or "I was so worried that I could not eat," but I had not realized before reading that book that we actually are sick when we have these mental conditions, that actual deteriorating cell changes take place, that fear and worry and grief and unhappiness and resentment, anger all of these things, actually produce similar, if not identical cell changes with those produced by infection, by fatigue, by loss of sleep. So I think the mental condition of the child is vitally important, it is intimately associated with the physical health of the child as well as the adult, and I think we do well to introduce this subject in the consideration of child hygiene. I am glad to see the subject being considered as an initial subject in the discussions of this division.

We have a popular fallacy to the effect that childhood is happy. As a matter of fact, we little realize how children suffer emotionally and how many little children are distinctly unhappy at many periods of their life, and how many distinct classes of unhappy children we have.

Dr. Barth, Milwaukee: There are several phases of child life that have not been sufficiently emphasized. A blank, which we are using in Milwaukee, has done more to control in this line than any other procedure of which I know. It is an absentee summary sheet covering every school room and which gives positive information concerning the whereabouts of every child. Furthermore, the child is not dropped from the school roll after an absence of three days, but is kept on the list as an absentee until positive assurance is had that the child has died or has moved out of the district. Truancy is the kindergarten of crime. Truancy leads to the formation of gangs and gang rule. Following up the child closely nips in the bud this vicious tendency and prevents a good deal of mental turpitude and crime.

Another factor is to fit the school to the child and not the child to the school. We are attempting that in Milwaukee, in part, by the establishment of special classes. We call them "Special A's," "Special B's" and "Special C's." We have also established "departmental teaching" in a number of the larger schools. That is, the child does not remain under the influence of any one teacher during the entire school day, but goes from teacher to teacher. The studies of the various teachers of this child are discussed and correlated in conference. These factors, I think, are important.

Chairman: The time has come when we must close this discussion, I am sorry to say, but I cannot do so without first impressing upon you the importance of the mental hygiene problem, the enormous economic loss to the country due to mental diseases, the grand total of unhappiness occasioned by them. Those of us who have paid particular attention to the psychiatry realize that a certain number of cases of insanity are preventable. The symptoms of the various types of insanity are but an exaggeration of certain traits of personality and eccentricities of conduct which are frequently observed in normal individuals. It is very desirable, therefore, to make studies of the personality of school children and cause a permanent record of peculiar traits of personality to be filed with the physical record of the child so that in the event of a mental breakdown later in life a study may be made of those

Digitized by Google

traits of personality that may be considered the danger signals of insanity. As we learn to recognize these signals with greater accuracy we are in a position to prescribe a training regimen for the child adapted to overcoming the tendency to a mental breakdown.

The next subject for discussion deals largely with physical education and physical training. In arranging the program we have not lost sight of the relationship of the physical condition to the mental status. In fact, I might tell of a very interesting experience of ours in our school inspection. On one occasion we found a little boy who had been in the first grade for four years and had never learned to read. The mental examination showed that the mental development of the child was normal for one of his social status, but upon making physical examination he was found to be suffering from very defective vision to such a degree that he could not read printed characters at the ordinary visual distances, and therefore, was unable to take advantage of educational opportunity. In fact, was considered a feeble-minded child because they had no health supervision, and, therefore, did not know the need for glasses was the basis of this child's inability to read.

I am sorry that Dr. Storey, who was to present this paper, is unable to appear because of personal reasons, but he has delegated Mr. Minor, one of his most successful agents, to present the paper.

Mr. Minor: Dr. Storey asked me to express to you his regret at his inability to be here to present this paper and I have the pleasure of assuming that responsibility for him.

Digitized by Google

ALIAS HYGIENE

T. A. STOREY, M. D., Ph. D.

Executive Secretary, Interdepartmental Social Hygiene Board, Washington, D. C.

Hygiene "is an ancient art. Some of its most important precepts formed a part of the wisdom of the Egyptians . . ." thirty-five hundred years ago. Hippocrates wrote a "treatise on airs, waters and places" over twenty-three hundred years ago and recorded in perpetuity certain valuable information that was even then a thousand years old. Over seven hundred years ago the Code of Health from the School of Salernum (1200 A. D.) assembled many facts on hygiene that are in harmony with modern scientific information. The Code passed through more than 200 editions and "For over two hundred years it appears to have been the most popular book in existence."

Since Hygeia, the Goddess of the preservation of health, was worshipped in the temples of her husband or father, Aesculapius, in that wonderful era of hellenic civilization which the later modern world has failed in so many respects to surpass or even equal, there has come into the affairs of mankind an increasingly large number of discoveries and applications that relate to hygiene. One might say that Hygeia has now so many children that she does not know them all or that the religion of Hygeia has broken up into many sects that know each other not. For to-day the world has many arts and sciences that have an unrecognized or unappreciated relationship with hygiene. The multiplication of the subdivisions of hygiene with their scientific bases, their dramatic importance and their far-reaching influences on the economic and social life of the people has obscured the great conception of antiquity. To-day the average individual thinks of hygiene as a matter of cleaning his fingernails, washing his face or shampooing his scalp. Such health achieving and health preserving enterprises as eugenics, prenatal care, care of the baby, child hygiene, medical inspection, play, athletics, physical training, safety first, medicine, surgery, dentistry, nursing, the feeding of an army and the recreation of a camp are not ordinarily recognized as aliases of hygiene.

Hygiene is the science and the art of the preservation of health. The sciences of hygiene are those sources of information from which we secure accurate data as to the agents that injure health, the contributory causes of poor health, the carriers of disease, the defenses of health and the producers of health.

The arts of hygiene are concerned with the application of the sciences of hygiene to the health needs of the individual, to the health needs of groups of interdependent individuals and to the health of associations of interdependent groups.

Digitized by Google

I need cite only a few examples to recall to you convincingly the ramifications of the scientific sources, and the practical application of hygiene.

Between 35,000 and 75,000 persons lose their lives every year because of accidents. These accidental deaths are largely due to mechanical, physical or chemical causes. The mechanical, physical and chemical injuries of war are still fresh in our memories. Hygiene must include a consideration of the mechanical, physical and chemical agents that injure health.

The pathogenicity of certain bacterial, certain protozoan and certain higher animal parasites has opened a large field for a great variety of scientific investigations relative to the living agents that injure health.

The history of the Jukes and of the Kallekack families establish heredity as a very important division of hygiene.

The relation of physiology to hygiene is obvious. As a matter of fact normal health is a product of normal physiology and abnormal health is a product of disturbed physiology.

The fact that there are approximately 75,000 deaths from cancer annually in this country and that there were over 6,000,000 deaths from influenza last fall in all countries and the fact that we know very little about the causes or the transmission of either of these diseases indicates that there are important fields of scientific research in hygiene that are as yet undeveloped and perhaps as yet not even identified.

The influence of the economic and social status upon health is obvious. Money can buy a certain amount of health. The individual, the family and the community that has resource and uses it wisely can buy protection from disease and can provide for effective constructive hygiene.

Our rather recently acquired knowledge of disease carriers—insects, animals and humans—has added some tremendously important scientific information to general hygiene and opened up great fields for research. I need only remind you of such insects as the mosquito, the flea, the fly and the body louse and you will immediately recall their relationship to disease. Only the most painstaking and varied entomological investigations have made it possible for us to understand the part these carriers play in the dissemination of disease and have made it possible for us to develop defenses against them.

Along with our greatly increased information concerning the scientific, economic and sociologic facts of hygiene, there have come also a

Digitized by Google

much larger variety of conditions requiring the application of those facts for the acquisition, conservation and defense of human health.

While our expertly qualified agencies are searching for further truth from the sciences of general hygiene, other agencies are engaged in distributing the information that we already have for the better information and education of our people.

We have agencies that are working to reach the individual in order to educate and inform him concerning protective hygiene, preventive hygiene, remedial hygiene and constructive hygiene.

Other agencies are engaged with the group for the purpose of informing and educating the home group, the school group, the occupation group, and the great public institution group. And still other agencies are concerned with intergroup hygiene in the rural community, the village, the city, the county, the State and the Nation.

This organization, The American Child Hygiene Association, contacts all these phases of hygiene. It must be concerned with the acquisition of a greater amount and more accurate information concerning the agents that injure health, the contributory causes of poor health, the carriers of disease, the defenses of health, and the producers of health.

It must be concerned with the education and information of the individual. It must be concerned with the hygiene of the home, the school, the factory and the institution. It must be concerned with the hygiene of rural, city, State and national communities. It seems to me self-evident that our greatest progress in health will come when the interrelations of the thousand and one agencies in hygiene are recognized and brought into an active team co-operation. This section on school age and adolescence has much in its field that is intimately in common with the organizations that are concerned with mental hygiene, eugenics, prenatal care, the hygiene of child birth, the hygiene of infancy, provisions for play and recreation, medical inspection, physical training, athletics, school hygiene, domestic, family or home hygiene, industrial or occupational hygiene, institutional hygiene, rural hygiene, city hygiene, State hygiene and National hygiene.

Fourteen States have enacted laws, more or less satisfactory, on physical training for their public schools. The work of this section is essentially the same as that covered by a modern program in physical training. There is a national agency in the field that is concerned with influencing other States to enact laws requiring physical training in the schools. The object of that organization and the object of this organization are identical.

Digitized by Google

There is a powerful campaign on now for the suppression of prostitution. I saw a record the other day of a little girl who, at the age of thirteen years, had spent two years of her life as a commercial prostitute. There are States in this country in which the age of consent is as low as fourteen years. These are problems of the school age and adolescence.

We have a national organization that is engaged in improving the instruction of teachers, another one that is concerned with better training of teachers of physical education. Both of them need all the support you can give them — and you need all the success they can achieve.

We have various governmental agencies that under different names are concerned with hygiene — one of these agencies, the Interdepartmental Social Hygiene Board, is organizing and applying its governmentally derived powers for the vigorous and co-operative emphasis of the tremendously important fact that hygiene, in its composite structure, with all its aliases, carries a resource in health information, health education, health defense, health conservation, and health acquisition that is competent to enormously increase man power and woman power, the most precious assets of a nation.

It would be easy to multiply references to good players that should be on a principal, and as yet unorganized national hygiene game; if it were possible to organize the plays, formulate the signals and perfect the team, there could be no such thing as defeat.

DISCUSSION

Chairman: I think this Association is fortunate in having had presented a paper so well worth while as is this paper by Dr. Storey. He has emphasized a point that has been mentioned on this floor more than once during this meeting, the interrelation of all health problems. As we stress the teaching of hygiene, we stress the proper manner to get the child to thinking and acting in terms of health, automatically. Really when we come to the final analysis of the success of measures for maintaining the public health, we find that it depends largely upon individual co-operation. Consequently, as we stress the teaching of hygiene in all its forms in the school, the practice of the principles of correct living by the developing children will become more and more automatic.

Having emphasized in this program the mental health and hygiene of the school child, we will now take up a subject that stands in definite relation to one of the most important problems of the school child; namely, nutrition. We cannot hope properly to nourish a child, however, without paying due attention to the care and preservation of the teeth. I will call on Major Harry B. Butler, formerly of the United States Army, but now with the United States Public Health Service, who will present a paper on "Oral Hygiene."

Digitized by Google

ORAL HYGIENE *

Major HARRY B. BUTLER,

U. S. P. H. Service, Washington, D. C.

Mr. Chairman, ladies and gentlemen, a manuscript was not prepared for this occasion, because I wished to deal very largely with the work of the Public Health Service in the State of West Virginia, which has only been in progress some six weeks. We learned a great many valuable things during the little disagreement we had with the Kaiser as to who should run the whole world. Among other things, the importance of a clean mouth. Dr. Clark, with his usual foresight, grasped the situation and there was formed what we know as Mouth Hygiene Unit No. 1, of which I am very happy to be a member. The State of West Virginia was chosen as our field of operation and here we find a splendid cooperation between the State educational and the State health authorities. Our equipment for this work consists of ourselves, five or six years' experience and an endless amount of enthusiasm. In addition to this, we are carrying with us a field equipment which is both compact and complete. We are prepared to perform any dental operation which may present itself. However, we are confining our work, our operative work, to prophylaxis for reasons which will be obvious to all. We are able to set this equipment up in ten or fifteen minutes and can take it to any part of a county and it not only attracts a great deal of attention, but we can demonstrate the practicability of sending an equipment of this kind even to the more remote districts in the county and giving the children first-class dental service. We are also carrying some three thousand feet of film which proves a very attractive feature of our work. We find it very valuable in closing the campaign which we try to institute in each county.

So much for the equipment we carry. Now what is the main object of our work? I was very much pleased at the session yesterday afternoon to find so much of the discussion of the papers read centering about the teeth. Every one seems to have something to

* From the stenographic report.

Digitized by Google

say about the teeth, and I felt very much at home, quite as though I were attending a dental meeting. It was very hard to say nothing at that particular time. Now, much was said here yesterday about tooth preservation and it was referred to as mouth hygiene. Our conception of the work is quite different from that, quite different indeed. When we are presenting this subject to the kindergarten, or to the first and second grades, naturally about all we speak of is the teeth. When it comes to the more advanced pupils or to a public meeting, frequently we say absolutely nothing about the teeth. We do not look upon mouth hygiene as a tooth proposition, but as a health proposition, and in speaking to an audience of this kind I should certainly go much further. I should say that mouth hygiene was not a proposition of hygiene for the individual, but rather a matter of sanitation for the community and of just as much importance as the installation of the proper sewage system.

As to the value of this work, there was a statement made here yesterday about there no longer being the need of medical attendance for a group of children who had received proper treatment of the mouth. I would like to go into detail at this point but the limited time will not allow me to do so. However, as the greatest testimonial to the value of thorough mouth hygiene in a community, or in a corporation, I wish to say that I can give you a list of one hundred and fifty private corporations or school organizations in which this work has been taken up, in some cases running for as long a period as twelve years, but I am unable to give you a single one in which the work has ever been abandoned after it was once instituted. I consider that the greatest testimonial and that it has demonstrated its value from a financial standpoint and from a health standpoint upon each and every occasion.

Naturally you would like to know something of the conditions which we are finding in West Virginia. They are just the same as you will find in any other State, and I must confess that they are bad. Among other things we found one which struck me as very peculiar; in one locality we found the health officer was the chief of police and not a medical man at all.

A boy who was brought to me very recently was said to show a criminal tendency and to be absolutely uncontrollable in school. I happened to drop into the room where the medical inspector was conducting his

Digitized by Google

examinations and met him there. This little chap had an exceedingly bad case of gingivitis. His gums were badly swollen, were dark red, and would bleed upon the slightest touch. I cannot see how it was possible for this youngster in any way to masticate his food and the medical inspector was passing this case over because he saw no caries in that mouth. Finally, I showed him what I saw in the mouth, but made no suggestion whatever as to what should be done or as to how the boy should be handled. The Superintendent of Education, the following morning told me that the medical inspector had become somewhat alarmed at the mouth condition which he saw upon second glance and that the boy had been sent home from school because in the estimation of the medical inspector he was a menace to the rest of the children.

The following afternoon we got hold of the boy and made him clinic material. The audience consisted principally of the Superintendent of Schools and the two medical inspectors of the city. This little mouth was shown to every scholar in that school and then our clinic proceeded. In about an hour and a half we had a splendid healthy mouth and it was again shown to all the children in that eight-room school. In addition to the improvement in the oral condition, we had there a very valuable lesson which was shown objectively to all the children. But something followed which is amusing, and, in addition to that, there is a principle which underlies this young man's actions that must not be overlooked. He had absolutely no care whatever as to what his personal appearance was previous to this oral prophylactic treatment. But before he presented himself to the children for the second inspection he found his way into the private lavatory of the superintendent, much to whose disgust he used the towel, brush and comb which were the private property of the superintendent, and he came out cleaned up. I do not believe from the appearance of the hair that it had been combed before in months, but an impression had been made upon that young man about cleanliness and he went through with the ordinary toilet which all children should go through, for the first time I believe during that school year.

The children who are delinquent are greatly interesting to me, and when we go to a school we make a special effort to see all these youngsters and properly chart their mouths. We are getting some very valuable information and in fact in the last six weeks I have seen but two children who were behind in their school work that had good

Digitized by Google

mouths. Some of the cases were very sad indeed. One was brought to me as one of the incorrigibles. He was at least three years behind in his grades. One of the first things we look for is to see whether the youngster has a normal occlusion or not and I asked him to close his teeth together. As soon as he did it he manifested great pain and opened his mouth before I had a chance to see how the teeth articulated. I said, "What seems to be the matter here?" He said, "I can't shut my teeth together." I asked him why not, and he said, "It hurts." I asked him to open his mouth. I found on the left side a lower six-year molar which was a wreck and there was a fungus growth from the pulp so large that it protruded above the masticating surface of the adjacent teeth and it was absolutely impossible for this youngster to place his teeth in contact in a normal manner without severe pain. Now, they said that this boy was absolutely beyond control and that he would not work. I think that he probably harmonized with the general plan of the school work just as well as would the teacher who made the complaint had she been obliged to bolt her food continuously as this poor youngster was, and these are the cases which are coming to us all the time.

Now, another case which was found yesterday before I left our field of operation was one in which the calculus had piled up to such an extent that it was absolutely impossible to distinguish the different teeth in the back of that mouth. In one or two instances the amount of calculus present upon these teeth was larger in size, greater in bulk, than the tooth which supported it, and these are conditions found continuously.

One of the greatest problems which we have to face is that of the six-year molar. I think the importance of this particular tooth is understood by all present, but I found in one school a class of youngsters between the age of six and seven years in which over forty per cent of these teeth were defective. Examining the older grades, in this very same school, I found that the six-year molars were missing in an equally large percentage — either missing or hopeless wrecks. Now, you understand as well as I the importance of preserving this tooth. Just why does that condition exist? I know perfectly well that in three years from the present time those little teeth which were slightly defective at the age of six or seven are going to be lost beyond recall. What is wrong in the first place? Either one of two things. Either the parents of the child do not recognize that particular tooth

Digitized by Google

as one of the permanent set or else the child himself has such a fear of the dental chair that he will say nothing about the breaking down of this particular tooth. Now, our work is valuable for this reason: We are getting at the parents, partly through the press, partly through our public meetings, partly through our film, and are trying to inform them in every way, beside sending them the ordinary parents' notification card, that these teeth are permanent teeth and that it is important that they save them. Now, if the cause lies in the other direction, in the fear of the child, why we are simply eliminating it because after we have been in a school for a half day our only trouble is in keeping the youngsters away from us.

DISCUSSION

Mr. John C. Gebhart, Association for Improving the Condition of the Poor, New York City: Our organization is very much interested in the dental program as it is in all features of the child health program. We are very much interested at the present time in prophylactic dentistry. Several of the cities in the east and north, particularly Bridgeport, Boston and Rochester, have developed this prophylactic dentistry. That is, they begin with the children of the early grades of school up to and including the fifth grade and provide for surface cleaning of the teeth of those children. The laws in these states have been amended so as to permit young women, who have had only one year's special training for this work, to be licensed to do this work so that it does not require the time of a licensed dentist. The work in Bridgeport is well done, particularly this feature of the work. All of the children in Bridgeport, up to the end of the fifth grade, have their teeth cleaned twice a year. The sixth-year molars the doctor spoke about are also attended to as soon as any decay appears. They begin with the children in the kindergarten grades and carry them right through so that they are very likely to discover any decay as soon as it appears and the dentists on their staff are able to have that repair work done. Now, New York City has been hampered through lack of funds from putting into effect a program as complete and as effective as they have in Boston and these other cities, but Dr. Baker of the Bureau of Child Hygiene endorses that program entirely, and this last year she has asked for eighteen of these dental hygienists for her work in the schools, but unfortunately the powers higher up cut out the appropriation and she will not be able to do that work. However, a year or two ago she did have a limited staff of these hygienists and tried them out as long as the funds lasted so they know the work that can be done.

Our association is doing an intensive piece of community health work in one of the districts in the congested east side comprising a population of about forty thousand, most of whom are Italians. The work there begins with care for the expectant mothers and prenatal education, registering the child at the milk station and so on. The dental work is part of that program and we are trying to co-operate with the health department and whatever agencies there are there to put in also a hundred per cent dental program for these children. We have already engaged

Digitized by Google

one of these dental nurses and have two dentists working on part time on the teeth of children. The work of the school children is under the supervision and control of Dr. Baker of the health department and through her co-operation and that of the department of education we are able to put this dental hygienist in one of the schools who began work this week. We have one of the portable dental outfits and move this from school to school. We are going through each of the schools when we can get enough help to do it and clean up the teeth of all the children in this district of which there are about ten thousand. We will do that for two or three years and then be able to tell what the results of that work are, and will be able to help the department of health to put in a similar program for the whole city.

Dr. Florence B. Sherbon, Division of Child Hygiene, State Department of Health, Topeka, Kansas: This is an important question and I think this portable dental outfit may help to solve some of our Kansas difficulties. May I ask the cost and where it can be obtained?

Dr. Ada Schweitzer, Chief, Division of Child Hygiene, State Department of Health, Indianapolis: I would like to ask, too, what is done in communities where there are no dentists and where no dental service is available. We found in some of our rural districts in our medical inspection work that children do not have the service of a dentist, although sometimes a dentist can be secured to go into the town for a limited time and do dental work for the children.

Dr. Anna Rude, the Children's Bureau, Washington: There are two states which employ state dentists, Vermont and North Carolina. Vermont has been doing good work for the past two years. We have not had many reports on that work, but I am sure it could be obtained by writing their state boards of health. The State Board of Health of North Carolina has a very excellent reprint of their dental work which can be obtained upon request.

Dr. Merrill E. Champion, Massachusetts State Department of Health, Boston: Mr. Chairman, I speak as the representative of another State Department of Health. We do not believe that it is the function of the state to do dental work and for that reason we confine our efforts entirely to stimulating the work in the local communities. As a matter of fact, I think that is an underlying principle that is well worth emphasizing. If I understood Major Butler correctly, he stressed the importance of prophylaxis rather than of treatment. I was present at a dental dinner not long ago and was very much surprised to hear what some of the men said there. One man who had done much experimental work emphasized the absolute importance of the care of the child so far as nutrition was concerned. He found, experimentally, that by altering the diet in animals he was able to produce at will faulty mouth conditions. I think that perhaps in some states, including my own, the ease with which a dental clinic can be established for doing mechanical work has rather misled the general public as to the underlying importance of some of the systemic troubles of which the dental disturbance is only a symptom.

The Chairman: I wish to say that in sending this oral hygiene unit into the state the idea is to create a state-wide demand for this form of health protection. The

Digitized by Google

unit does no corrective work. Probably in isolated instances it might do so as a matter of accommodation. The idea is to go into the community and show them the size of the problem by examining the mouths of the children in school and doing a certain amount of dental prophylatic work, cleaning their mouths, removing the scales and incrustations in the worst cases and instructing the children in the use of the toothbrush.

Through the instrumentality of the American Red Cross we give every little child who has no brush a new tooth brush and a tube of paste to take home with him along with a notification to the parents of the dental defects observed. The unit is provided with an educational film, the presentation of which serves to get the people together. Advantage is taken of this opportunity to instruct them in the importance of oral hygiene, emphasizing the need of proper care of the teeth, and the effect of poor teeth upon the nutrition and development of the child.

In the vast majority of our states funds appropriated for health purposes are small. We all know they are entirely inadequate to meet the situation. Therefore, our aim is to interest not only the authorities in this way but some local philanthropic citizen who might be induced to finance such a clinic for the local school. We selected the State of West Virginia because of the enormous industrial activities in that state. In practice, the unit operates usually in the county seat and makes a demonstration and tells exactly what an outfit will cost, how much the services of a dentist and his transportation should cost, and advises the use of the county seat as the base from which to send out a dental unit to the outlying schools of the county. It is perfectly feasible — and in some instances we have met with wholehearted response. Major Butler will close the discussion.

Major Butler: I am very glad to hear one of the gentlemen refer to the dental hygienist. I consider her a most important factor in any mouth hygiene movement. In fact, we may truthfully say she is the foundation upon which we build. Many of these women, while spoken of as having taken but a year's course, have back of them as high as ten years' actual experience in dental offices and are most efficient in prophylaxis.

As to the equipment we use, it is quite like the army field equipment and admirably adapted to this work. It consists of a chair which is very comfortable and thoroughly practical. It is easily taken down and packs in a chest which forms the base when in use and weighs but eighty-five pounds. Our cuspidor and stand are of aluminum and these also pack in the base section making a piece about twenty inches square and shipping at nineteen pounds. We use the standard foot engine which, packed in its case resembling the ordinary dress suit case, weighs but forty pounds. This makes a satisfactory and very durable equipment. The one we carry has seen overseas service and is still in very good condition. It can be purchased for $132.

Some one spoke of a state employing dentists for this work. There are several that I know of. New York and Tennessee are among the more recent ones to take up this work. Both have assistant secretries to their state health departments whose sole duties are to look after the mouth hygiene proposition in their respective states.

As to the part-time man I can only see one scheme by which a part-time man

Digitized by Google

would really be of much service to you, namely, that you pay him enough for this part time so that he would not find it necessary to engage in private practice. Otherwise, you will find him so interested in his private matters that your time will be cut short on both ends every day. That is only human nature.

We do not stop at the teeth when speaking of a mouth toilet but include the tongue, rinsing of the mouth and the throat. We recommend a gargle of salt water. In our examinations we endeavor to see the tonsil. Many schools have no medical examination and often we get a good view of the tonsil without even the use of a tongue depressor.

Colonel Clark told us to go out and preach the gospel, the gospel of a clean mouth. We are preaching this gospel, not in "all the world," but in the whole state at least. We are reaching as many as we can and in every way we can. It is a great work, a wonderfully important work and I surely wish Billy Sunday would preach the gospel of a clean mouth.

Mr. Gebhart: May I answer one question that was raised? In regard to these part-time dentists. They are paid so much per hour. We have come to the decision that we cannot get good results on a volunteer basis at all and all of our dental work is paid for.

The Chairman: Ladies and gentlemen, I wish to assure you of my deep appreciation of your interest in the subjects for discussion in this section. I am quite sure, as state and city departments of health become better organized and more divisions of child hygiene are established, there will be an increasing number of representatives of these divisions in attendance at the meetings of this association and a consequent increased interest in this section which deals with the health supervision of the child of school age.

Digitized by Google

Digitized by Google

NURSING AND SOCIAL WORK

COMMITTEE

Miss Estelle L. Wheeler, R. N., Brookline, Mass., *Chairman.*

Miss Grace Anderson, Supt. Municipal Nurses, St. Louis.

Miss Mary Arnold, Executive Secretary, Babies' Welfare Assn., New York City.

Miss Pansy V. Besom, Asst. Division Director of Public Health Nursing, New England Division, Red Cross, Boston.

Miss M. Frances Etchberger, Supt. Babies' Milk Fund Assn., Baltimore.

Miss W. L. Fitzpatrick, Associate Supt., District Nursing Assn., Providence, R. I.

Miss Janet M. Geister, Children's Bureau, Washington, D. C.

Miss Emma E. Grettinger, Director, Bureau Public Health Nursing, American Red Cross, Seattle.

Mrs. Virginia Knox Kimble, State Supervisor of Nurses, Topeka.

Miss Zoe La Forge, Children's Bureau, Washington, D. C.

Miss Mary A. Mackay, Supt. Visiting Nurse Assn., Denver.

Miss Sara B. Place, Supt. Infant Welfare Society, Chicago.

Miss Mary Powers, Director Bureau Child Welfare Prov. Board of Health, Toronto.

Miss Elisabeth Shaver, Boston.

Digitized by Google

Digitized by Google

GENERAL OUTLINE OF WELFARE WORK FOR THE CHILD FROM 2 TO 6 YEARS

From the Viewpoint of the City

SARA B. PLACE, R.N.,

Superintendent, Infant Welfare Society, Chicago

Your Program Committee has asked me to outline very briefly, a program for child welfare work for the age group — from two to six — with particular reference to city conditions.

In this day one may not contemplate such a program without assuming the premise of prenatal and infant welfare programs. We have ceased to argue the need of *such* work. We assume that any group of people interested in the question of child welfare concedes not only the expediency, but the grim necessity of ante-natal, natal and postnatal care if they dare think in terms of the coming generation. Not that there may be more children, but that there may be better children, better born and better reared.

Assuming this premise, what is the present status of welfare programs for the child from two to six?

Whether or not the Children's Bureau ever has money or personnel enough to follow up the work of Children's Year, this country *must* be eternally grateful to Miss Lathrop and her associates for at least phrasing a challenge to the mother mind of this country in the slogan — "Weigh and measure your child."

That weighing and measuring propaganda saved no lives, but it bombed from a rut many directing forces in public health organizations, and started all over this country community programs which give heed to the most neglected child — the child of pre-school age.

May I call to your attention some possibilities in city work with this older child:

We already have the machinery. Wherever work for the child under two years has been started, there is a directing office, a center of operation with its equipment, and a staff of doctors and nurses. Such a system can very naturally offer further education to the mother in the wel-

Digitized by Google

fare of her child. Also, we have other agencies, medical as well as non-medical, *ready* to co-operate in work for the child of pre-school age.

It is absolutely vital to any public health work, rural or urban, that the local physicians be at least sympathetically tolerant through having definite knowledge as to the aims and objects of organized public health work.

In the city the question of the "family physician" is not the problem it is in the rural communities, because seldom in the less fortunate areas of a city does a family employ regularly any one doctor, hence, no personal or professional feelings can be lacerated through constant changes in medical advisors.

Corrective measures may often be employed only through the help of dispensaries with their children's clinics under specialists (dental, eye and ear, skin, orthopedic). Without co-operation, without a co-ordinating of hospital and dispensary facilities, work with the pre-school child could not advance to any degree. Physicians, nurses, dietitians must learn what a well child is that they may detect the subnormal, malnourished or defective, and then refer them to agencies equipped to deal with them.

In addition to the medical agencies whose work co-ordinates with ours in the program of infant welfare, we have the non-medical agencies whose special problem is the "run about;" for example — nurseries, kindergartens and playgrounds. These offer means outside the home for meeting the food and rest problems, methods of inaugurating educational work and an opportunity for supervised recreation and such agencies exist in every city but are not used to the greatest good, because the mother does not know how best to adapt them to the needs of her family.

The establishment of kindergartens does not come within the province of child welfare organizations, but surely an accurate knowledge of the subject does and so does the preaching of the need for kindergartens in *every* city district.

Part of our opportunity lies in instructing the mother, and assisting her over an initial period; to so plan her household duties that the kindergarten child may have a chance to go to kindergarten. This necessitates the carrying out of the policy of "early to bed," which without fail appeals to the child once he knows it spells his school attendance.

Digitized by Google

Settlement houses relieve the pressure along this line, and with their mid-morning lunch or their noon meal are often the saving factor in a child's food story.

Definite co-operation with supervisors of play in the public playgrounds is vital. Mothers, particularly foreign ones, are loath to permit children to leave the house unless they have a reassuring knowledge regarding the individual who is to be responsible. This reluctance means confining of children to the much over-worked rooms of tiny flats, bringing results with which you all are familiar and which needs no delineation from me.

In the case of the older child of this two to six group, who in many homes assumes responsibilities far beyond his years, it is entirely possible to make available the use of bathing facilities in the field houses of our parks, which make it possible for him to follow the instructions he has received in personal hygiene — make it possible for him early to appreciate the value and delight of a clean body.

Then there are the relief giving agencies. Your thought need only be directed to the alliance between economic darkness and ill health to bring out the need for intelligent co-operation between the welfare agency and organizations that can give material relief. We pervert the best use of public health organizations when we permit them to any extent to be relief giving agencies.

I have discussed first the co-operating organizations that stand outside the machinery itself, outside of the child welfare agency, in order to present last some of the problems *inside* such machinery.

You are familiar with the physical or mechanical equipment of such a center, therefore it needs no discussion here. Regarding the personnel of the staff for the work with the older child. We have seen the necessity of employing a physician, plus nurse, and most organizations concede the value of a dietitian to the work.

The question at once arises as to just how the work may most efficiently be divided. What are the possibilities?

There is no question about the physical examination of the child. Only the doctor should do this. When physical defects are found, it is logically the duty of the nurse to see that the child has the benefit of corrective treatment (using co-operating agencies) such advice coming from the doctor. So seldom does it occur that the unnormal situation arises from but one factor, that it is impossible to say a nurse shall pro-

Digitized by Google

ceed to any given point: and that from there on it is purely a dietetic problem. It is impossible to draw hard and fast lines in dealing with this human problem.

The thread-bare adage — an ounce of prevention is worth a pound of cure — applies here. In welfare work for the child from two to six, one is confronted by the fact that in most instances the harm has already been done — so our problem is corrective — mainly nutritional. The nutritional education therefore assumes a large place in our work for the time being.

There are the two methods of procedure regarding the instruction of the mothers. First, by group instruction at clinic time, and second, by having the detailed instructions entirely a matter of home work. In Chicago we have proceeded with the method found most successful in our infant welfare work — that of giving all the detailed demonstrations in the home.

Not only must a mother know what foods to give, and when, but she often must have help in the planning of her budget which would make it possible to add the much needed milk, eggs or green vegetable. She must *know* the value of adequate rest for her child. She too often of necessity uses up her own entire margin of physical energy, but the mother is rare indeed who is willing to let a child suffer once she is *convinced* of the error of her way.

The follow-up home work can not be merely a matter of endeavoring to help solve the food problem, but instruction must touch every phase of home life that we may hope to have a higher standard of family life develop as the result of having gone in and touched the family at all.

(Records — Physical examination, development of child, difficulties of record for child 2 to 4, interesting mothers).

There is a diversity of opinion regarding the exact method of procedure which is to be followed in conference and home work. Whether or not the child of the older group should be cared for with the baby of two is a moot question. It has been the experience of the Infant Welfare Society of Chicago, that our most successful nutrition clinics were those held at a time when babies were not seen. It surprised us considerably to find that mothers preferred to bring the older children at a time set apart for them.

Probably one of the biggest problems is — Who shall instruct the individual mother at the clinic regarding the food problems of her child.

Digitized by Google

Must it be a doctor who has had only the dietetics of his medical school days plus the rather scattered reading of a busy general practitioner — or a physician with a special training in dietetics — may it be a public health nurse who has had the generally accepted two months of dietetics in training school — or should it be a public health nurse who in addition to her training has had a special course in dietetics — or shall it be a dietitian who has had sufficient social training to make it possible for her to come into any organization and assume a fair share of the responsibility and opportunity in educating mothers?

DISCUSSION

The Chairman: At our meeting in Boston in 1914 the nurses held a round table discussion, on the care of the child from two to six. We did not get very far, as none of us knew just what we wanted to do, or knew just what was needed. We only knew that the child from two to six was being neglected and that because of this; much of our work done up to the second year of age, was being undone during the four years before the child came under the supervision of the school physician. Very little was done for the child of pre-school age in this country until the last two years when several organizations, in spite of the fact that they realized there were many problems in prenatal and infant welfare still to be settled, decided to attack this problem of the care of the child from two to six. We thought we could not use our time better this morning than in trying to bring this subject to your attention. The discussion will be opened by Miss Winifred Fitzpatrick of the Providence District Nursing Association.

Miss Winifred L. Fitzpatrick, Associate Superintendent District Nursing Association, Providence: Welfare work for the child from 2 to 6 years has long been acknowledged to be a most important part of a child welfare program and the one most neglected.

The Children's Year Campaign of the Federal Children's Bureau, as Miss Place has said, has done much to direct attention to the great need of care for this group.

It was not the discovery in this Campaign that a number of children were a few inches shorter than normal height, and a few pounds under weight that counted as its value — It was the bringing into the work of weighing and measuring the children, a group of physicians hitherto apparently uninterested in children's work, and the opportunity afforded to tell them what our work is, and what we are trying to accomplish. Another result was the awakened interest in the group of volunteer workers and the parents. This piece of work aroused an interest in the health of children in a shorter time than anything else had ever done.

In a program of welfare work for children of any age there must be the Centers or Consultations where mothers can come and talk with the doctors and there must be co-ordination or perfect co-operation with all other existing agencies.

The most important part of the plan however is the work in the home.

The mother is in her natural surroundings and will ask questions that she would never ask at the station. Home visits should be made as frequently as possible and

Digitized by Google

the mother should know how and where she can reach the nurse should she need or want to talk to her.

The instruction given the mothers usually concerns the children, diet, clothing, rest and cleanliness. It would seem as though the logical person to give this instruction is the public health nurse — but she should have a knowledge of dietetics, and be able to give advice in planning the budget.

When defects are discovered the nurse should direct the mother into the proper channel for correction. By so doing when the child enters school, he is in good condition, and saved much loss of school time later.

In Providence our nurses have cared for all children from birth to school age since 1910, and we have always considered the care of the child from 2 to 6 just as important as the care of the child under 2. We have been most fortunate in having had on our staff since the work started a trained dietitian with whom the nurse could consult about their problem diet cases.

Unlike Chicago all the children in Providence from birth to six years, are seen at the same center and by the same physician and at the same time.

Miss Place: I should like to ask Miss Fitzpatrick just what their dietitian does?

Miss Fitzpatrick: We have two dietitians. They attend the special clinics at the hospital in diabetes and they consult with the nurses and give us courses on dietetics and advise the nurses on the outline of diet for the children.

A Delegate: May I ask Miss Fitpatrick if they go into the homes and teach the family budget making?

Miss Fitzpatrick: Yes. Our dietitians are not nurses. They are trained dietitians and they do a great deal of budget work.

The Chairman: The Providence Association seems to have worked out a very practical plan. I would like to ask Miss Place who does the teaching of the diet at the Chicago Centers?

Miss Place: At present we have three dietitians on our staff and they take the entire dietetic problem. We have had courses of instruction for our staff for the last six months and we are simply feeling our way and trying very hard to work out methods which will meet the needs in our particular groups. The dietitians also go into the homes and make such studies as have been indicated.

The Chairman: Isn't it your idea that the nurses will in time take that over?

Miss Place: It very logically follows that the nurse could do this sort of thing, but undertaking it in an organization the size of ours it was quite impossible to find nurses at once who had had sufficient dietetic training. For the time being we feel it must rest in the hands of dietitians and whether we are going to change will be settled later.

Dr. Karl G. Leo-Wolff, Buffalo: Miss Place asks who should direct the feeding. Should it be the physician, should it be the nurse, or should it be the dietitian? I think it should be all three together. We are just beginning to learn something about the effect of diet on the child. The pre-school age, in my opinion, is not

Digitized by Google

only the age during which we have to prevent communicable diseases, but the period during which we have to learn what each particular child really can eat. We are just beginning that work. We are beginning to learn a little something about food proteids. We are beginning to learn the prevention, perhaps, of eczema, the prevention of all kinds of trouble that we formerly did not think we could correct. I feel personally that it is not sufficient to wait until school age to take our children to the throat specialist and have their tonsils and adenoids removed. If we give adequate care to the children during the school age, if we feed them right, we will be able to prevent their suffering later. Then we will be able to prevent the development of adenoids and tonsils; so I claim that the only proper way of taking this matter in hand is to get the physician, the nurse and the dietitian together and keep them together.

Mrs. Jean T. Dillon, Wheeling, West Virginia: Miss Fitzpatrick speaks of the mothers' hesitancy to ask questions freely, except in their own homes. We tried in West Virginia to meet that situation at the time of the weighing and measuring campaign, and to clinch the mother's interest so that she will return. The doctor who makes the examination cannot give a great deal of time to each individual child and mother, so we have tried to arrange for one nurse whose entire time will be given over to conferences with the mothers. We plan for her to be alone with each individual mother, either in a separate room, or if that is impossible, then at one side of the room apart from the others, where they may converse undisturbed. The nurse takes up with the mother the defects discovered by the doctor, the underweight and its remedies, etc., and encourages the mother to talk freely about her problems and to ask questions. It has worked out beautifully and has aroused the interest, and secured the co-operation of the mother, as no other method we have tried has done.

Dr. Henry F. Helmholz, Chicago: I would like to direct attention again to the importance of the special training of the physicians who are doing this work. When ever you have preventive work to be done by men who are practicing medicine, it is surprising to see how long it takes to get the preventive attitude of mind. We are gradually getting over that difficulty so far as the infant welfare work is concerned, but it is going to be just as great a problem with this work for the child from two to six. I say that particularly, because malnutrition of the child is found in all strata of society and at the present time practically nothing is being done for that child. We must emphasize, over and over again, that in preventive medicine we must have special training.

The Chairman: I think we realize that we need just that thing. Special training is very necessary.

Dr. Florence B. Sherbon, Division of Child Hygiene, State Department of Health, Topeka, Kansas: I am especially interested in the thought which Dr. Helmholz has just advanced and which several others touched upon during yesterday and today's discussions. It seems to me that most medical people who have gone into preventive work, and particularly those of us who have gone into child welfare work, have had to re-educate ourselves. The discussion yesterday hinged upon sources of education for preventive child welfare work. I do not know of any such source. I

Digitized by Google

think all of us have had to educate ourselves. I know that when the child examination work first started I was embarrassed myself and I think every one I saw begin to work was embarrassed to know what constitutes a normal child. We have been educated in our medical schools to look for what constitutes an abnormal condition and all our medical work is based upon that rather than upon the point of departure of what constitutes normal development. I think our medical schools start from the wrong premises. The education of the physician should start with teaching him what constitutes a perfectly developed child, a perfectly developed adolescent child, a perfectly developed young adult, a perfectly developed adult and the forces which make for perfection in physical development and physical function. Instead of that we are constantly looking for something we can treat. When we are confronted with the child who has nothing about him that we can treat, we are confused. I think that we are facing a radical readjustment in our medical education. It cannot come any too soon for the welfare of humanity.

Miss Laura Franklin, Kirkwood, Mo.— I would like to ask if any one has solved the cooking class problem for the rural mothers. We have doctors who tell the mother what the children must have. We have the dietitian who tells them what to do to make the best out of a small amount of money they have, but who is teaching the mothers to prepare the food for the children. That is one of the difficulties that I have had in my work. Teaching them how to cook the simple food that the children must have. I would like to know how others have solved this problem.

The Chairman: That is in the rural communities?

Miss Franklin: In either rural communities or cities.

Miss Minnie H. Ahrens, Chicago: It seems to me that that should be the function of the dietitian. Unquestionably the problem as to how it shall be done in rural communities is difficult of solution. On the other hand, all of our state universities are doing some very good work in extension work along this line and it seems to me that that much can be done through these extension courses. And may I say a word for the dietitian? I think that like many of the rest of us, the dietitian is realizing that she must understand not only the scientific side of food, but the practical, and how to apply her scientific knowledge. I believe there is a real awakening among this group of workers that is going to be a very valuable asset to our work.

Dr. Ada Schweitzer, Chief of the Division of Child Hygiene, State Department of Health, Indianapolis, Ind.: I want to say just a word about the dietetic work in Indiana. It does not come strictly under that head, but in the extension department from our State Agricultural College we have a number of young women working in cooperation with the National Agricultural Department as home demonstration agents. These young women form clubs in the country districts and teach the mothers not only how to cook these simple foods but also teach them the various projects in home making that are especially valuable. They do not limit themselves to the teaching of mothers. They have clubs of young girls and there are also boys'

Digitized by Google

clubs that are formed by the men in charge of the county agricultural work. Another way in which the preparation of simple foods is being taught is in the vocational classes in the public schools. We have the cooking classes there and the girls, beginning with the sixth, seventh and eighth grades are taught cooking throughout the State. Classes are forming for mothers also. This work does not reach all the mothers in the State, but it reaches a fairly large percentage of them so that cooking is being taught quite thoroughly throughout the State of Indiana by these agencies.

Mr. Frederick S. Crum, Newark: The question of dietetics, while it begins with the baby and continues in the pre-school age, also continues throughout life. Last year I had the privilege of writing a little pamphlet for the Emergency Fleet Corporation on restaurant facilities for shipyard workers, stressing the importance of having better food, warm food, well-balanced rations and at cost or near cost in the shipyards. That pamphlet, I may say, had a very wide circulation among other industrial plants and as one result of it a great many cafeterias were installed and are still being installed in the industrial plants of this country. The cafeteria is now being developed in high schools and penny lunch rooms are being installed in the lower grade schools and these institutions are performing a very creditable work, I believe, in improving the health of the children. But I want to speak particularly upon the question of records. I really believe that in this country we are reaching the point where it is possible to get a personal history of our people from birth until adult and even old age. I should like to see at any early date a method of record keeping which give us the complete record of the baby, and which should be followed right along throughout life — a continuous record of height, weight, attacks of illness, etc. This should be continued along through school age, until the early industrial age and so on through adult life and even to the time of death. If we once get such a continuous record I am absolutely sure that we will find that a great many of the so-called degenerative diseases have their origin and beginning in early life in the attacks of such diseases as scarlet fever. Until we get these complete records, we will never know the real and best methods of attack against these preventable degenerative diseases of early, middle and late adult life.

Dr. Dorothy Child, Harrisburg: I wish to say that in the State of Pennsylvania such a record card is just being introduced for use in the health centers, providing for a semi-annual physical examination. This card is parallel with the card used in schools, and is turned over to the medical inspection service of the schools when the child enters school.

Dr. A. O. Peters, Dayton: We are solving some of these practical health problems in nursing service in our city, where it can be done to advantage in a city of that size, by our plan of associated nursing. I was particularly struck by the emphasis in the paper placed upon the value of home service; we believe the most valuable work that a nurse does is in the home. We have done away with all of our milk stations. Of course we still conduct our clinics and have our health centers but we do not think much of sending out the work or rations for people already prepared for them. We believe more in sending the nurse into the home, and doing for them there, teaching the mother how to do for herself. The question of dietetics, of course, comes up for older children because when the nurse goes

Digitized by Google

into the home, she is interested in all matters pertaining to the health of the entire family. We have a dietitian whom the nurse can consult. The matter of having properly trained nurses, does not bother us much. We believe that any woman who is intelligent enough to become a graduate nurse, with the proper training which can be given her in the Health Organization can become a very good public health nurse. We have daily conferences with our nurses and we do not have much trouble about their efficiency.

Miss Ahrens: I believe I cannot let what the last speaker has said about the public health nurse pass. I am a nurse and am very glad the doctor feels we are so able after we graduate, but I am sure those who have been doing public health nursing feel that our nurses do need a great deal further preparation. I hope to see the day when our training schools will give public health nursing training along with the other training and when that is done then we may say that our graduate nurse is ready to do public health nursing, but in the meanwhile there is a great deal that the nurse does not get without special training.

The Chairman: One of the speakers mentioned the public schools and the classes they have there. It seems to me that we ought to be able through such classes to do a great deal more than we have in the past in teaching proper diet and the preparation of that diet in the homes, not for the infant of course, but for the older children in the family. Are there further questions?

Dr. Sherbon: You may be interested in a little experiment in practical dietetics that we are trying out in Kansas.

Our State Board of Health is just making an investigation preparatory to licensing children's homes. Of course, one of the problems we met instantly was the problem of the feeding of children in these homes. The Home Economic Department at our state university is helping us in this way; we are requiring the weighing and measuring of all children in these homes and this department is sending graduate students to certain of these homes to make detailed studies of the dietetics. We are going to check these dietetic analyses against the physical findings of these particular children and we are going to keep that up until we feel that we have worked out a program which we may reasonably require of these homes. We feel that this will help us in our effort to standardize them; and it strikes me that the home economic departments in various places might help out in the various dietetic problems of community life in the same manner. I know the Director of our Department of Home Economics was very glad to put graduate students upon practical investigations of this kind. She said it was very much more worth while than to do theoretic work on imaginary problems.

The Chairman: In connection with college extension work?

Dr. Sherbon: This was in connection with graduate work in the economic department of our state university, but I have no doubt it is done in other places.

The Chairman: Our second paper deals with the child of from two to six, from the viewpoint of the rural community. Mrs. Kimble is not able to be here and Miss Mary Power of Toronto has kindly consented to read her paper.

Digitized by Google

GENERAL OUTLINE OF WELFARE WORK FOR THE CHILD FROM 2 TO 6 YEARS FROM THE VIEWPOINT OF THE RURAL COMMUNITY

MRS. VIRGINIA KNOX KIMBLE, R.N.,

State Supervisor of Nurses, Kansas State Tuberculosis Association, Topeka

As yet it would seem the real rural viewpoint has never been reached by the educators and promoters of public health. It is a never ending mystery to me to visit meetings of nurses — national, state, and private — and health departments and find they do not seem to see the pictures I see in the rural question. No systematized way of reaching their problems has been found. This is evidenced by nursing plans and programs and by health cars which can only reach by railroad, the larger towns. These towns are rural and it is splendid work, but it doesn't reach the scattered farm community. We have the country nurse — may her tribe increase — but there are too few of her and there is enough pressure brought so the one-teacher school is not reached and the strongest argument of all, that the rural community has never been reached, is the health record. Who has ever seen a really satisfactory health record for the country nurse? Until we find a systematic plan for caring for our country problems we are only struggling towards the light and it will take many generations to accomplish much in the way of reduction in our morbidity and mortality rates.

There is a proverbial class of people that walk in where "angels fear to tread" and having less working experience in working out rural problems than many others, I feel I may belong in that class in attempting to give you my impressions of the need, the necessity for removal, and a tentative plan for the solution of our problem. Only a keen realization of my own failures in reaching the part of our people we hear so little about, tempts me to talk.

What does "rural" mean? We must have a standard from which to work. "A rural community is a community without proper water supply, proper sewage disposition, proper health regulations and with an inadequate health department." An epidemiologist says that is a good working definition, but we will have to make ours reach farther. Many plans, much literature, and legislation will affect and

Digitized by Google

reach the above group that will fail to reach the real country child. This fact was demonstrated during the children's year campaign and by the "well baby" conferences which we, as nurses, have held in small towns and communities. We always know we have reached the better educated, more progressive people of our community, yet the people whom we most need to reach, frequently homes of the largest families and from which we would get the largest percentage of physical defects, have not attended our clinics and many others who would have liked to come failed, because the distances are too great, or our conferences and weighing and measuring have been held perforce at the harvest time when actual home duties must come first.

In all our lecture work we are taught to get the early history and background of the people among whom we work and here, as nurses, we fail the rural American. He is just as much a class as an Italian or a Bohemian and if you fail to understand him and his customs, you fail just as dismally as you would in little Italy, in like circumstances.

Where have we gotten this background? Most nurses are city born, city trained, and have had only city experience. Rules and regulations of sanitation that are a necessity and a matter of course to her, are a closed book in the rural community and likewise many of the rural customs are unknown to city nurses.

Labor in these communities is scarce and must be had, so the health of the worker is never questioned. Just recently, I saw a tenant leave a farm where he had lived for twenty-five years, milking for his own family of nine and the farmer's family of seven. He was an undiagnosed (until he left) advanced case of tuberculosis, kept from sentiment, and given the light jobs like milking to do, to support him. Do not think this picture is the exception, its the common one, and the hygienically clean milking shed, or dairy screened from flies, is the exception. The only reason I can give that we do not all die, is that pathogenic organisms are not present and natural immunity protects us. Do these rural people have small families? Seldom or never. There is no race suicide here, but they do often bear nine or ten children and rear three or four, and milk is only one of many factors contributing to the high death rate. You say "Let's have a publicity campaign on milk; tell all about milk; tell them its dirty." Oh no, you can't straighten a tree when it's grown and you can't teach new methods successfully to adult farmers for many reasons. The

Digitized by Google

farmer is his own sanitary officer; operates his own garbage plant, independently pays his own bills; bothers nobody, has been told all his life that his milk and butter are fine. He is Czar in his own home. The baby dying is a natural order of events; "just Providence." "His father before him lost five and he isn't going to have any "city product" telling him how to run his farm and family." Another path of instructions must be found — this is reason number 1, against a publicity campaign.

Reason number 2, and a better one: Lack of pathogenic organisms, natural resistance and the amount of good we get from milk, our natural advantages, outweigh the disadvantages and the loss we would suffer by the children *not using milk,* which is what would happen if we had a publicity campaign and fear was engendered before new methods were successfully taught.

A publicity campaign would really do more harm than good until we have legislation and can enforce some of our teaching. Our farmers are studying the question for themselves from the financial side. The tuberculous cow is disappearing because it doesn't pay to keep her, it now being usual to feed the herd on a balanced ration, and if she doesn't show increased production from this she is disposed of. The farm bureaus have put in good work here, and have taught that it was poor financial policy to keep inferior cows. The Federal and State Children's Bureaus are teaching well and reaching many, but they were established long after our farm bulletins and their teaching, is mostly feminine gender, for the man doesn't read them. It's a woman's accepted part to teach and rear babies. The farmer has little if anything to do with it. Of what use is it to tell the mother she must take care of her baby and expect results when she handles only one end of the game? That we are failing somewhere and not providing the proper machinery is evidenced by the loss of 300,000 children under five years of age annually. We are not reaching part of our problem, or we are not teaching correct methods fast enough. Almost every factor (with few exceptions) that figures in our city problem enters into our rural one as well, plus a few individual ones and minus a few of the city defects. A second factor that figures in our problem is "isolation from modern educational methods during pregnancy, and isolation from proper care at birth." The mother works until the last minute; gets up in a week, because there is no one to care for the children; and the overwork and overstrain that make her

Digitized by Google

lose so many children also renders her unfit to care properly for those she already has. Most of our farm women look forty when they are thirty. Conveniences are always given her last. There was water in our home barn twenty years before it was in the house. The woman wants money for education of her children and she saves by using woman power instead of machinery. There is a feed cutter and a gasoline engine in the barn, but each Monday morning you can find the churn working in the woman's hands and hear the rub, rub, of a washboard. It's difficult to make her see it could be done any other way; she is loyal to her traditions.

Do they isolate for contagion? No. "Mother never did. The children have to have it sometime." One of my nurses was met at a rural school room door recently by the teacher and she said: "Don't come in if you are afraid of mumps." "Why?" the nurse said. The teacher replied, "Well, some of the children had had it for several days and remained in school and the parents and trustees decided since several had been exposed, to let them all continue to come." But the nurse said, "Don't you know you are breaking a state law?" and she promptly had a school cleaning of mumps. The farmer trustees didn't like it; they agreed it shouldn't be done.

Lack of enforced and adequate child labor law militates against child life in rural districts. The farmer literally must make hay while the sun shines, everything and everybody being pressed into service. The farmer's hours are necessarily long, the sun hot, the work hard and exposure from the elements great. In one rich farming county, where the families were all of sturdy German origin, we found forty young boys rejected for tuberculosis. All the milk and butter and most of the best produce had been sold in order to acquire and pay for land. The children didn't especially care for milk and the mother knowing nothing of food values, had given them strong tea and coffee. Even as very small boys they had worked at chores too heavy for them, rising at early hours and working long days. In these forty tubercular boys we have an example of under nourished child labor, paying the penalty. I tried education of the farmer. I tried it on my own brother, thinking I might practice on him with less fatal damage than elsewhere. The tenant's children, age ten and twelve, were home from school thinning corn. One had adenoids and one could hardly see. Gently I approached the subject: "If those children had their defects corrected they could work better and would make

Digitized by Google

better men." The glasses were fitted and the adenoids removed, but this wasn't done easily. It took a whole summer's vacation to accomplish it. Emboldened by my success and knowing that my brother's word was law with the tenants, I suggested keeping the children in school — that farm labor was injurious at such an early age, it being too heavy and tending to lower their resistance. I was met by point blank opposition. "We have done enough now; these people have always worked as boys and you can't bring your city notions home with you. You will spoil all the tenants on the place and I can't have all my hands ruined." You say "Isn't there a law?" Yes. But who sees that it is enforced? In most states an exemption is made of domestic work and agricultural pursuits. "Doesn't the county nurse help." Yes — if there is one. She is one of our teaspoonfuls of sugar that is saving the nation, the children of America, but there are only a few such nurses and one nurse in a big county is very little and for the children of pre-school age she seldom has the card of entry to the home. It is only by accident she comes across them for no one knows they are there or what the defects are, until the children are of school age and her work is so heavy she can't follow up the cases she does know about. The amount spent for rural education is about three mills on the dollar; in the cities the average is seven mills. Rural people are often far from the physician and the necessity for calling him in has never been emphasized. One of our nurses recently held a children's conference in a small community. Child after child had diseased tonsils. A few had otitis-media; some were deaf, and finally one little child came with a high temperature. The mother wasn't doing much for it. One of the neighbors thought it might be malaria. A few questions brought out the whole story. None of these children showed any of these symptoms until a slight illness and eruption the spring before. Yes, all the children had it, but they were not sick. The sick baby died in a few weeks in Mercy Hospital from acute Bright's disease. All these children had scarlet fever, one visiting the other, nobody very sick, but see the wholesale ill results. A doctor had never been called; the mother simply using home remedies.

Still to those of us who know the country and love it, it's the best place on earth and it is a well known fact that the best products, both human and otherwise, come from the soil. The country has the greatest natural advantages of sunshine and air; the food is the best in the world and there is a solution of their problems. Education and

Digitized by Google

more education, plus legislation of the right kind, will accomplish much for these rural communities. Each effort made has helped, but we must put forth more effort in concentrated spots if we are to make a showing quickly. The number of country nurses can be increased until the county is covered much in the same way a city is covered now. A community plan much like the Cincinnati plan, can be established so that every mother may receive prenatal care. The county fairs should be used for weighing and measuring. This advertises what we are doing. It seems to me the picture shows might be used and rural entertainments given with great benefits to all, at much less cost per capita than many other forms of education in public health. All of you must have observed the psychology of the pictured and written truth with all classes of people. It is believed much oftener than spoken truths. The trained nurse is faced every day with the firm belief in what a patent medicine man has written. Why not have a page of public health in Montgomery and Ward? It is in every country home. But the plan that would reach all in the present day and every succeeding day is the plan we have used to Americanize our foreign citizen. Teach it to the children and in the schools. They will take it home faster than we can, and in this day of even limited compulsory education, we will reach a far greater number of people than in any other way. It needs, however, to be a part of the curriculum; given due consideration, made a part of every child's course; and a credit given for it. It seems much more important for future efficiency to have a sound mind in a sound body than to have an extra credit in any study, however important.

We, as nurses, have seen much more of the good results of manual training, dietetics, and sewing, than the teachers who have taught them. Hygiene has been taught, but it needs to be more practical. It needs more time given to it and should not be optional or taught as it is one of my counties now, between four and five in the afternoon, when the Little Mother's clubs are given. Even with it taught in that desultory fashion, in the county in which we established the first county work of our state, the results are very decided. Rural communities are asking for regular well-baby conferences, epidemics have ceased, milk inspection is in progress and it is now possible to get clean cows' milk. Through the school child many smaller children have been brought to the attention of the nurse and defects corrected. Even were

Digitized by Google

this course a regular part of the curriculum, we are all neglecting the biggest factor in country life. All of our teaching is largely female and it should be specifically male. Even in our cities a huge percentage of our people have not proper sewage facilities. In the country none of them have. The privy is located at the most convenient point, also the well or cistern, and nine times out of ten the privy is away from the house on a little hill and the water is in a depression near the house, furnishing direct drainage and outlet for soil seepage. The boys should be taught how to build a sanitary, flyproof privy and its proper location, the value of good water for farm homes and how to secure it; the construction and running of a model dairy, flyproof and germ-free. These boys should also be taught the habits and breeding places of flies. With this knowledge and knowing why we have state and Federal bureaus of health, epidemics would be of rare occurrence. Typhoid, hookworm, malaria, etc., would not be called country diseases. Pick any ten farmers in this community and how many of them could tell you how to film a pond with oil to prevent malaria-breeding mosquitoes, or how many of them would connect the privy with the case of typhoid. A nurse on our staff tells a story of a typhoid investigation. She asked the usual routine questions of a public health nurse — the location of the water, the well, the screens, the milker, the cows, the care of the utensils, etc. Finally the farmer said "Lady it isn't my cow that has typhoid, its my daughter." These are my daily experiences as I work in rural nursing. I know these conditions can be corrected by education, not of the adult but of the children: They, who will be the fathers and mothers of tomorrow.

DISCUSSION

The Chairman: Mrs. Kimble has shown us that the rural nurse certainly has many problems. We are going to postpone the discussion of this paper for we have with us one who has been doing some work in the rural communities and I think her paper will tell how some of these problems can be solved. I am very glad to introduce to you Miss Janet M. Geister, formerly of the Children's Bureau and now of the National Organization for Public Health Nursing.

Miss Geister: I did not realize when I told Miss Wheeler that I would speak on the Child Welfare Special that Dr. Bradley would be in the audience. Dr. Bradley is in charge of the Special now. She has been working in Indiana, but has just finished doing three counties in Illinois. The work of the Child Welfare Special is so directly connected with the rural child from two to six that I am very glad to talk or speak about it this morning.

Digitized by Google

THE CHILD WELFARE SPECIAL

JANET GEISTER, R.N.,

The Children's Bureau, Washington, D. C.

The Child Welfare Special is a Child Welfare Station on wheels. It was conceived out of a realization of the rural child's need; it was born out of a desire to bring to the rural child resources that usually are available only to the city child, to bring to as many homes as possible, through personal contact, the lessons of child conservation, and to arouse and stimulate interest in the welfare of the child. For a number of years the Children's Bureau has conducted child welfare conferences in connection with their rural surveys. Quite naturally the number of children that could be thus seen has been limited, and Miss Lathrop has earnestly sought a way to reach more children with the resources at the disposal of the Bureau.

As a result of the Children's Year Campaign, a number of communities tried the experiment of putting health conferences on wheels in order to reach the children who could not come long distances to visit the child welfare stations. Organizations in Cleveland, Vermont, Connecticut and Michigan are among those that are doing pioneer work in this respect. This seemed to be such an admirable method of reaching rural children, that the Children's Bureau resolved to try it out under the difficult conditions connected with cross country work.

In May of this year, the Chicago Tuberculosis Institute put into operation the dispensary truck in which to hold clinics at different parts of Cook County. This motorized dispensary was designed by Mr. James T. Phillips county secretary of the Institute. It contains many features not seen in other trucks.

At the suggestion of Mr. Sherman T. Kingsley and through the courtesy of the Tuberculosis Institute, we followed this plan very closely, in the construction of the car that was to be sent out by the Bureau. This car is called the Child Welfare Special.

A few words regarding the construction of the Special may give you an idea of how it is possible to conduct satisfactory child welfare con-

Digitized by Google

ferences in it. The body of the Special is constructed of wood; the inside measurements of the conference room are 9½ feet long, 6 feet wide, and 6 feet, 4 inches high in the center. Four windows, each 2 feet square on each side of the truck are high enough to shut out prying eyes — at the same time admitting excellent light for work during the day. The driver's cab, which can be entered from the conference room by means of a sliding door, is entirely enclosed in glass, and with the shades drawn, furnishes a roomy dressing room. The opened head and tail gates, provided with double folding doors and heavy curtains that fit into grooves, furnish another dressing room. Both of these dressing rooms have not only proved themselves adequate for our needs, but are a distinct advantage over the larger room usually provided by the school house or church. When a mother enters one of the truck dressing rooms, she has the exclusive use of it until the child has been undressed, thoroughly examined, and is back in its clothes. This results in less fretting from the children, lessens the chance of contamination from possible infectious diseases, and insures absolute privacy.

A 15-gallon water tank, tucked away over the driver's cab is connected by faucet with the stationary wash stand in the conference room and in turn is connected with a permanent drain to the outside. The doctor's examining table and the linen lockers are built up over the wheel housing in the car, an arrangement that results in improved appearance and in the saving of space. A scale, adjusted to measure to the ounce, both for babies and older children, is carried in an especially built trunk. There is enough storage space to carry on an average of 2,000 publications; a full set of exhibits, a balopticon, several boxes of slides, two rolls of films, several dozen charts for lecture purposes, cots, bedding, cooking utensils for three persons, a large supply of sheets and muslin squares, and all the equipment necessary for conducting a child welfare conference.

This body is mounted on a ton chassis that is equipped with pneumatic tires. The interior of the body is painted a solid white; the outside is a battleship gray with a blue and white lettering on both sides. This coloring gives the Special a very cheerful appearance and at the same time reduces its bulk. Two systems of lighting, one for a 110 volt current that can be taken from a nearby public building, and the other for a 6-volt current taken from the truck's own batteries, furnish excellent illumination for night work. An electric heater has been recently installed in order that work may be continued through the winter,

Digitized by Google

though, of course, this work will be done in the south. The problem of heating the dressing rooms may require some time to overcome though we do not anticipate much difficulty. Weather strips have been put on the cab to protect against the wind and rain of winter, and a tarpaulin made to cover the rear doors to shut out the dust that seeps in otherwise.

The staff consists of a woman doctor, a nurse and chauffeur on the car, and an agent who travels in advance of them. It is possible for the staff to sleep on the Special — the doctor on an army cot in the conference room, the nurse on a similar cot in the rear dressing room, and the chauffeur on the especially constructed driver's seat. They have as a rule, however, scorned the shelter of the car and have slept out under the stars except during rains, when they erected the 9 x 9 tent that is carried with them.

As the Special was built in Chicago, it was Miss Lathrop's desire to keep it near home for its first trials. On the 11th of last July we had our first truck conference in Morgan County, Illinois. Since then we have visited three counties in this state and have examined from 100 to 150 children weekly. In selecting the counties to be visited, we take into consideration the proportion of rural population; the possibility of getting good cooperation and the condition of the roads. An agent, traveling two weeks in advance of the Special arranges the itinerary, attends to the publicity and assists in the organization of child welfare committees. She carries with her wood cuts and publicity material for the newspapers, printed instructions for the child welfare committees, copies of the announcements that the ministers are asked to make from their pulpits, and the big posters that advertise the coming of the Special. She visits the city and county officials, editors, physicians, ministers, farm advisors, county demonstrators, representative citizens, business men and social agencies to explain the purpose of our visit. When the county child welfare committee has been called together, an itinerary is mapped out and then the local committees are organized for the communities to be visited.

Every committee member is given definite instruction in advance and her field of work clearly outlined. These committees are asked to provide a suitable location for the parking of the Special, a spot that is centrally located, well shaded and near a public room that can be used both as an exhibit and waiting room. They are also asked to make a thorough canvass of their districts before the conferences in order that

Digitized by Google

everyone understands clearly the purpose of the Special's visit. They are asked to announce that the doctor and nurse are ready to examine any child under 7 years of age— that no treatment is given but that the doctor gives to each parent a written record of his child's condition together with any recommendations she has to make — that the examination is absolutely private, and that there is no charge of any kind for this service.

As a result of the work of the advance agent, the staff finds everything in readiness on arrival of the Special, and the conference can begin as soon as the doors are opened.

It is not possible, of course, to set up any exhibits or charts in the car itself. These are taken out of their boxes and set up in the nearby waiting room and a member of the hostess committee put in charge of them. At the opportune moments the doctor and nurse take time to give brief talks to groups of waiting mothers using the exhibits or charts as a means of illustration. The films and slides are shown only at the prearranged evening meetings.

The examination of each child takes about 20 minutes. After the child is undressed and before he leaves the dressing room, he is wrapped in a clean white square. He is weighed and measured by the nurse and then put up on the doctor's table for her attention. As the doctor progresses in the examination, she discusses each point with the attending parent. At the conclusion of the examination the parent is given certain copies of our publications together with a record of the child's physical condition. A second record is made out and sent to the Children's Bureau office for the purpose of statistical study.

At first we made the mistake of trying to cover too much territory by making only one day stops. We found this utterly impractical. We found that in one day we could not possibly see all the children — little impression could be made on the community, and we could not hope for follow up work, and we learned that a few weeks of one-day stops would completely wear out the doctor and the nurse. We tried the two-day stops and in some instances found that these too were impractical. The three-day stop seems to be the most satisfactory. In our present county we are spending five days in the county seat, three days in the next largest place, and two days in each of the five other towns. The size of the town and its surrounding population, of course, determines the length of the stay that is to be made.

Digitized by Google

The first test of the efficiency of the Special is whether it serves its purpose as a conference station. In the main the Special has proved a success from a mechanical point of view. The dressing rooms are adequate and the conference room has proved itself remarkably convenient in spite of its small space. There are factors, however, that would be changed if another truck were to be built. In spite of our efforts to keep its weight down, our car, completely loaded, tips the scale at 8,000 pounds. The one-ton engine, supplemented by the extra pulling power provided by pneumatic tires, is adequate for most road conditions, but we have some difficulty in negotiating sandy, steep hills. Mechanical adjustments made recently, however, have given us greater power and we are assured by the manufacturers that we will have no further difficulty. It does not seem advisable to materially reduce this weight as the body must be made substantial and weather proof to withstand the jar and uncertain weather of travel. A heavier engine — 1½ or 2-ton unit — would easily care for this load and at the same time carry enough reserve for any bad spots that are encountered. Because of its size the Special does not travel well over muddy roads but as States are developing roads so rapidly all over the country, this is a disappearing rather than an increasing objection. We find that we could reduce the height of the car by five or six inches and still permit easy walking within the car. This would very considerably reduce the sway.

If the interest awakened is a guage of the success of the Special, the experiment has indeed been successful. The response we have met in every community visited has exceeded our fondest hopes. Physicians, business men, every one who could be of service to us have given us hearty cooperation. The response from parents has been equally gratifying. Excerpts from reports give an indication of the reception the Special usually receives. In the report of the first conference we read, "In spite of the fact that the threshing season was at its height, the doctor and nurse were almost overwhelmed by the crowd of mothers, fathers and babies. Examinations lasted until late into the evening. The first baby examined at this conference was the daughter of a local physician who later spent a number of hours in the truck as the guest of the government doctor." In one of Dr. Bradley's reports we read, "We especially appreciated the interest and cooperation of the two local doctors, brothers, who not only came themselves both days to the conference, but loaned their machine and a son to drive in from the country

Digitized by Google

such mothers and children as might otherwise not attend the conference." Still another report reads, "All through the afternoon and evening this routine continued. The dressing rooms were constantly occupied; the doctor and nurse paused only for a hasty supper — yet the fathers and mothers continued to wait. It seemed as though they had been saving their questions for years against just such an occasion as this. The visitors were all English speaking people, all deeply concerned over the welfare of their children, and all determined that the Government doctor should not leave the community before their children had been examined. Mothers, unable to be served in the afternoon, came back after supper accompanied by their husbands. These men, some of them still covered with chaff and dust, had spent a hot day behind the threshing machine — yet they patiently awaited their turn and listened carefully to the doctor's recommendations."

In describing one of the September meetings, Dr. Bradley wrote: "It soon became evident that it would be impossible to examine all the children, so on the last day the women agreed to submit but one child from a family, each mother selecting the one with which she most needed help." Later in her report she said, "Among these was a baby suffering apparently from inherited syphilis; another in an advanced stage of marasmus; a bright little boy with a T. B. infection of the spine already draining through the hip, and one with evidences of pellagra. There was an interesting family of father, mother, twin boys, and two other little fellows, suffering, as were most of these children, from lack of nourishing food though greatly overfed. They listened with interest to our suggestions and the father promised to buy a cow and have the tonsils removed from one of the twins, so that he might continue his school work without continual interruption from repeated attacks of tonsilitis.

"A small namesake of Champ Clark came to be weighed and measured up to the great and original speaker. The principal of the local school brought his little girl to ask advice in regard to a misshapen mouth from continual thumb sucking. The next day she insisted upon coming again to show us the gaily decorated cuff which prevented her from bending her elbow and reaching the greatly desired but discarded comforter.

"We swung into G —— about dusk to find the entire populace congregated on the public square to greet us. Here as in H—— we parked

Digitized by Google

the truck in the school yard and by getting an early start the next morning, we had the exhibit installed, the car in perfect order, and we were examining our first baby forty-five minutes later. For three days there was a steady stream of vehicles, ancient and modern, passing through the grounds. Often as many as seven might be counted at one time lined up under the trees."

We are frequently asked if the Bureau intends to follow up the work of the Special by efforts of a more permanent character. The underlying theory of the Bureau is that if a Government agency such as the Children's Bureau investigates, reports, demonstrates, the conscience and power of the local community can be depended upon to undertake any local action necessary. The Children's Bureau is limited by law to certain fields and it cannot enter actively into follow up work. It is our belief too, that the follow up work done by the community itself has more lasting results and arouses far more local interest than anything attempted by an outside agency. There is a very definite value in any work that arouses a community's attention to its needs and points a way to a constructive program of correction and prevention.

Dr. Bradley in a recent report states: "As a result of the service of the Special several communities are already employing public health nurses, in some instances supplementing a nest egg left over from Red Cross funds and in others raising the entire amount by public subscription. In one town a sensible woman's committee refused liberal contributions from public spirited men, preferring, they said, to have every one share in the responsibility and the privilege of supporting this service. Instead they asked $1 from everybody and got it. In another county a group of miners at one meeting raised between $700 and $800 and agreed to supply the rest in order to give their wives the help to which they are entitled."

The question that arises in the minds of all of us, is — do the results justify the expenditure of time, energy and money? If from my observation of the work of the Special, I were asked if the truck might be considered a good investment from any point of view, I would answer an unqualified "Yes." There are, of course, difficulties and inconveniences still to be overcome but the cordiality of the response, the awakened interest, the new efforts to conserve childhood that are following in the wake of the Special, are, in my opinion, well worth any expense or trouble we have been to. Its very bulk and unusualness

Digitized by Google

challenge attention instantly and when its mission becomes known it enlists the hearty cooperation of the entire community. The Special is a very tangible evidence of Uncle Sam's interest in his children — it has a dramatic appeal that is easily capitalized. Dr. Bradley in one of her reports says, "The Special has the distinct advantage of at once gripping public interest as none of the previous work could do. This may seem spectacular from the professional standpoint, but it gets results. It is believed that the ground can be covered better by the Special than in any other way; that its better equipment will make far better results than any method tried to date; that its usefulenss is directly in proportion to the ability of the physician in charge to make her public realize that she is merely demonstrating the need of periodic examinations and a method of accomplishing the same; that she bears in mind the fact that the examination is merely an incident and not the object of the Special, and that its more important function is to stimulate and aid in the organization of permanent follow up work by the community, and that she does not scorn to take advantage of the dramatic element of an appeal from the Government at this psychological time."

The reports of the other Child Welfare trucks indicate that while difficulties have been encountered, on the whole the project is full of promise — it is an exceptionally fine advertising and educational medium.

The Cleveland report says, "The Children's Special caused people in all walks of life to think about baby conservation. It was a popular publicity feature and so became educational by catching the attention of all sorts of people. The mother who naturally shuns the baby welfare center for once had the center brought to her in so attractive a form that she was deeply interested and immediately became a convert to the policy of seeking help from the center whenever the baby needed attention."

The Connecticut report states, "Perhaps the most far reaching accomplishment of the Baby Special was the arousing of the smaller and rural communities to their need for Child Welfare work. Before the coming of the Special many of these communities had thought their children were well taken care of because they had plenty of fresh air and milk. Many of the towns that were so apathetic and indifferent now realize that these things alone do not make for healthy and strong children and a number are making plans for permanent child welfare agencies."

Digitized by Google

In summing up the qualifications of the motorized health conference as an agent for stimulating and arousing interest in the conservation of life, I believe our experience demonstrates that it is entirely practicable. There are mechanical difficulties that must be overcome before visits can be made to remote regions. These difficulties, however, do not appear to be insurmountable and with every new experience we gain knowledge that will guide us in any future plan. The project involves considerable expenditure of money but the results appear to justify it. Dr. Bradley who through her work on the Child Welfare Special has opportunity to study its utility from all angles, wrote: "I only wish that the Children's Bureau had at least four such trucks or better still that each state might equip a truck for its own use along these lines."

DISCUSSION

Dr. Frances Sage Bradley, The Children's Bureau, Washington: May I say just a word in regard to the Special. Possibly Miss Geister mentioned the fact but I could not hear all she said. It has been extremely interesting to see that this type of work makes a very definite appeal not only to the women but to the men of rural communities. One expects women to be interested in the welfare of children, but some of the most responsive audiences we had were composed entirely of men. The farmer knows that a definite ration fed intelligently to poultry or any kind of stock will bring them to market size quicker, better and cheaper than if fed in a haphazard way. The rearing of children, while not for commercial purposes, appears to them as based upon the same principle, and they realize the lack of training which handicaps their wives along this important line.

We met with a group of farmers one afternoon in the office of the County Agent, and those men went home thoroughly convinced of the practical value of such work and brought their wives and children to our conferences. Another group was a Trades Council of miners, hard working men, who requested us to appear before them and explain what we meant by Children's Health Conferences. They asked many questions as to how adequate information might be secured for mothers; the expense of a public health nurse, and so forth. Before adjourning, that group of grimy men raised among them between $700 and $800 towards the salary of a nurse who is now caring for their children and instructing their wives.

Dr. Ada E. Schweitzer, Chief of Division of Child Hygiene, State Department of Health, Indianapolis: I want to speak from the standpoint of Indiana. We have been very fortunate in having Dr. Bradley with us for a survey of Shelby county, but, owing to an unfortunate combination of circumstances, we were unable to give her much help from the State Department. Practically none. She did have help from the visiting nurse in Shelby county and the local committee there. Dr. Bradley's work, I feel, is going to result in a great deal of good. Though

Digitized by Google

her work there reached a great many people who had been reached in various ways, it aroused an interest that had never been aroused before. The nurse said she felt her work would be very much more effective than ever before because of the work that had been done by this Children's Bureau Special. In some of the small towns in which Dr. Bradley worked, the towns that Mrs. McCaslin is finding it difficult to reach because she must reach a large number of persons, and she is only one person, the people are asking whether they may not have visiting nurses for their home towns, and are planning to get them and to cooperate with Mrs. McCaslin in her work. They are planning to do a great deal of work for the pre-school child. The doctors there are interested and, especially doctors who have returned from foreign service, want to help in the work, and they are perfectly willing to devote a certain amount of time to this kind of work. They want the county to rank high and very unfortunately, as I fear, many doctors have a wrong conception of the infant mortality rate in that country. One reason we chose the county for Dr. Bradley's work is because the infant mortality rate is 111. They estimate infant mortality rate, as many doctors do, on the basis of population, and imagine they have a very low rate. We expect to correct that notion very shortly. Another interesting fact is, that so many children were listed by the Committee that Dr. Bradley could examine only one in each family. A mother having one child in the family examined wanted the others examined, and they are going to do that themselves. They are asking now whether arrangements could not be made for the examination of school children as well. They will hold a meeting in the very near future for the purpose of arousing public sentiment in favor of examination of all children. The work in Indiana had not been very widely advertised, and yet it aroused so much interest that quite a number of counties have asked to have the Baby Special brought to them. As Dr. Bradley has been ordered from Indiana, that will be impossible, of course, but many of these people were very insistent and kept wondering whether they could not have the Baby Special in their county. We feel that, even if they cannot have it there, the interest aroused in the advantages to the children has been such that we shall accomplish a great deal of good as a result of Dr. Bradley's brief visit. There is one point that I think is a very important one; the interest of the medical profession in the Baby Special was aroused to such an extent that the Indianapolis Medical Society, with between three and four hundred members, asked that Dr. Bradley come up to the Society and give us a review of the work, and tell us something about what the Children's Bureau is doing for the children and about her work in France. She very kindly consented to do this. The meeting was given up entirely to infant welfare work and public health nursing. Our Public Health Nursing Association supervisory nurse, Miss Tupper, gave a talk on standards of public health nursing, and Dr. Bradley gave one of the most interesting talks ever given before that Medical Society on her work abroad and on the work the Bureau is doing. I have heard many expressions of appreciation from medical men who had not hitherto taken a great interest in public health work. They had been interested in a general way, and yet the consensus of opinion among those men was that every doctor in Indiana must help in public health work, especially in the baby work.

Digitized by Google

Dr. M. E. Brydon, Richmond: I want to ask a question. First, what about the financial side of this question, and second, how may the complete cards be obtained from the Children's Bureau? It was stated that the Children's Bureau record cards were used. I have been doing this work in Virginia to a certain extent and have been unable to get these cards. I have asked for the cards and they have been torn in two, and the side that is given to the mother is sent, but the other side that should be reported to the Children's Bureau is not sent. I wonder what the action of the Bureau is in this regard.

Dr. Anna Rude, Children's Bureau, Washington: I am glad to answer that question. The cards referred to by Miss Geister are medical record cards which we keep for our own statistics. The Bureau has never sent out any model or standard physician's record cards. We have a very simple card which is given to the mother with the doctor's remarks, i. e., recommendations after she has made a physical examination, and the other card which we use is just a complete physical examination record, which we have used in our special surveys of the preschool child, and at conferences, and also on the "Special." The data which we have from these cards will, ultimately I hope, furnish valuable information on the physical condition of the preschool child. The card to which you refer is undoubtedly the Children's Year card, which we distributed last year. It has a table of heights and weights, so when requests for a weight chart comes in we send these left-over cards, with one-half of the card removed, since the other half was a return card used only during the Children's Year Campaign, and we do not now wish that card returned.

Miss Marie Lockwood, Wilmington, Delaware: I would just like to tell you something of what we did in Delaware in the way of recording, weighing and measuring tests. We had a duplicate of the Children's Year card printed so that for every child weighed and measured in Delaware, there is a similar record in that locality where the child was weighed and measured.

The Chairman: Our closing paper will be a statement of the 1919–1920 program of the National Organization for Public Health Nursing, by Miss Zoe La Forge, of the Children's Bureau, Washington.

Digitized by Google

PROGRAM OF THE NATIONAL ORGANIZATION FOR PUBLIC HEALTH NURSING 1919–1920.

ZOE LA FORGE, R.N., Washington, D. C.

It is some time since the National Organization placed the emphasis of its work on stimulating public demand for public health nurses. The emphasis is now placed on imploring nurses to enter this field. An unlimited future lies before the nursing profession in public health nursing, because it stands potentially for health protection and sickness care to 100 per cent of the population, according to the need of all. It stands potentially for the equitable distribution of nursing service, with no wastage of its precious skill. To the new opportunities created by the war have been added the demonstration of its effective organization and its capacity for ready expansion occasioned by the influenza epidemic. It will, in the relatively near future, we hope, be added as one of the most welcome benefits of health insurance. Then, if not before, it will be recognized and claimed as a public utility and no longer as a charity — and the public health nurse will have reached her goal of being, according to the measure of each individual's needs, a public servant, a community nurse. Decades may pass before this ideal becomes real, but the National Organization has laid out for its 1919–1920 program some measures, which will surely help to bring the time nearer.

The program was formally announced in the annual report of the executive secretary of the National Organization for Public Health Nursing and printed in the August number of the Public Health Nurse.

The three main divisions of this program may be here restated in three paragraphs taken from the six-page folder which forms a part of the present membership campaign:

Educational. The National Organization will continue as before its efforts to establish more courses of training for public health nurses in educational institutions and in adequately equipped hospitals located in communities where co-operation can be secured with properly supervised health and social agencies. It has also undertaken to raise a scholarship fund of $150,000, of which approximately one-half has already been subscribed by the American Red Cross.

Digitized by Google

Recruiting. Conservative estimates place the demand for public health nurses at seven times the number now available. Along with its efforts to increase present educational opportunities, the National Organization has therefore undertaken a campaign addressed both to student nurses and to high school and college graduates, with a view to inducing more young women of good educational background to enter the field of public health nursing.

Legislative. In order that the public health nursing movement may consolidate itself with the normal processes of democratic government, it is highly important that good state laws providing for public health nursing be passed as soon as possible. The National Organization, working always in co-operation with public officials and with other recognized agencies whose interests are involved, contemplates a legislative campaign in about thirty states where present statutes relating to public health nursing are inadequate or unsatisfactory.

Digitized by Google

RURAL PROBLEMS

(JOINT SESSION, WITH SECTION ON PUBLIC HEALTH OF THE SOUTHERN MEDICAL ASSOCIATION)

Dr. W. S. Rankin, Secretary, North Carolina State Board of Health, ***Chairman***

Digitized by Google

Digitized by Google

RURAL DENTAL AND SURGICAL CLINICS.

GEORGE M. COOPER, M. D.,

Director, Bureau of Medical Inspection of Schools, State Board of Health, Raleigh, North Carolina

In establishing dental and surgical clinics in North Carolina for school children the North Carolina State Board of Health has taken an exceedingly advanced stand. In making this statement I hasten to assert most emphatically that in undertaking this work we have done so with many misgivings, and I have never felt more humble in my life than I do now in discussing this work and in undertaking to keep it going. In the whole history of the human race there has never been an advanced move made for the betterment of social conditions that did not have to fight the special interests, selfishness and prejudice of somebody. In establishing this work we have found that it must be no exception to the general rule. We have undertaken these things after long and careful deliberation, we have carefully weighed the difficulties and the advantages to be derived, we have assumed our stand deliberately, and our platform is based upon fundamental principles, and personalties have not been allowed to have any weight whatever in our decisions. We have made this effort through the school children and through the school system, because we believe that any educational system is incomplete unless it places in theory and practice as much importance on the physical development of the child as it does on his mental care. Intellectual progress is almost entirely dependent upon improved conditions of life.

Another reason for our undertaking this work is that we have found from experience in a thousand ways that no matter how much preaching and teaching is didactically done all the sons of men are lineal descendants of St. Thomas. In other words, to paraphrase Balzac, "they are all doubting Thomases, and words must be supported by visible facts." All the temperance teachings in the schools of twenty-five years ago would have been absolutely worthless had it not been that every line of every text book and every word uttered by every temperance lecturer had many specific illustrations of the truth of the teachings. In every

Digitized by Google

city block, village, hamlet, and country community in the United States the town drunkard was a living illustration of the fact. Hence, the teaching took hold. Again quoting Balzac, "the calling of a country surgeon is the very last position that a man aspires to take." The reasons are obvious. Therefore, we have found that if our teaching and our advice in regard to these matters is ever to be worth more than the paper on which it is printed, something must be done instead of talked about. So as there are no surgeons and dentists, in the isolated communities especially, nothing has been left for us to do but to take surgeons and dentists to these people if they are ever to get the service.

These clinics are simply an integral part of the follow-up work to medical inspection of schools in North Carolina; and by medical inspection of schools in this State of an overwhelming rural population, we do not consider at all the detection and control of contagious diseases as the term is so largely understood in discussing city school inspection. The control and prevention of contagious disease is largely left to the quarantine officers and State epidemiologist, and very properly so. To be effective in preventing contagion in a school through medical inspection, would necessitate inspection each morning of every child before being assigned to his room. That would necessitate the employment of a vast army of physicians for each morning in the day, which, of course, is utterly out of the question for nearly all our schools. By medical inspection we mean the detection and the correction of the common physical defects which the man in the street, of ordinary intelligence, could recognize and would realize needed correction for the best interest of the child.

The law in North Carolina under which we are doing medical inspection is almost identical with the famous *Children's Bill* enacted by Great Britain in 1907 and put into effect in 1908. Under that law each county council or city board in England, and each local board of education in Scotland enforces an inspection of every school child three times between the ages of five and fourteen years. Our law requires this three times between the ages of six and fifteen years. As in Great Britain, our law requires this to be done by either a physician or a trained school nurse. We are endeavoring to perfect a state-wide system under this law, and are using a card which was carefully devised and which has been adopted by all of the city authorities in North Carolina of any consequence as well as by the country schools under our

Digitized by Google

supervision. In filling this card the teacher cannot fail to get a smattering of the principles of applied hygiene and it inevitably causes the child to get ideas concerning his physical person that he would possibly never get otherwise. This information is carried home to discuss with the parents and many of them thus become greatly interested.

After an examination of thousands of children in North Carolina we have found that about 80 per cent. of them have defective teeth demanding immediate attention. Of the 80 per cent. we have found that less than 5 per cent.— and this covers all ages of school children from six to twenty-one years of age — have ever visited a dentist. This deplorable state of affairs was discovered to be not alone in the rural districts, but one of the worst places in North Carolina was one of the biggest cities in it, with fifteen dentists practicing their profession within the city limits. We found the conditions as bad in one of the biggest schools of the State, within a stone's throw of the Governor's Mansion, as it was in the sorriest cotton mill town that we have inspected. Therefore, we reached the conclusion that it could not be a matter of money as much as indifference, ignorance of the consequences of neglect and the fear of the dentist on the part of the child, and last, and most important, the refusal of the majority of dentists to treat children when they can possibly avoid it.

In the matter of defective vision, diseased throats and deficient hearing, we have found through these same thousands of examinations that these defects range anywhere from 5 to 15 per cent. of the total school population, and that less than one tenth of 1 per cent. have ever made any attempt to have the operations done for the removal of these conditions.

After ascertaining all these facts first hand and knowing these conditions to exist from Cherokee to Currituck, in all the length and breadth of the State, we simply could not afford to sit down and soothe our conscience by examining these children and sending their parents a note stating that such and such defect exists and requesting them to have treatment instituted. In short to get anything done, the people had to be shown visible facts to support words of advice.

Therefore, early in the summer of 1918, we instituted our traveling dental service for all school children between the ages of six and twelve years inclusive regardless of social or financial standing, sex or color. We limit the age period because six to twelve inclusive represents the

Digitized by Google

age when the work is most needed and when most good can be accomplished. Each dentist is provided with a portable outfit consisting of a portable chair, a foot engine, student's cabinet, and the necessary supplies to place the commoner or simpler fillings and to do cleaning and prophylactic work in general. As a result of nine weeks' work by one dentist in a mountain county this summer, the county superintendent writes that fifty dozen tooth brushes, with tooth paste to match, have been sold by one druggist to the school children of that county. Our work is, of course, mostly educational, and this one fact is positive proof that the people see the point. We have at present six dentists in the field and each dentist is costing us in the neighborhood of four thousand dollars per year, including his salary, expenses, supplies, and everything needed for doing the work. The main difficulty has been, and is, to get dentists of ability and industry to do the work in the proper spirit that it is intended to be done. Our ideal for this work is a permanent infirmary, with an electric engine, the best dental chair made, and other equipment to match, at every county seat town in North Carolina, with a personnel provided by the State Board of Health sufficient to do this work each year for every school child needing it. It will be the best money the State ever spent. The children can be easily brought into town in trucks provided for the purpose, taking them school district by school district. In that way the loss of time for the dentist may be avoided and one dentist can do much more work. This, I say, is our ideal. As to just how long we will be in reaching it depends upon the support we get from the dentists themselves and the people of North Carolina. The State Dental Society has unanimously backed this work in resolutions at two different State meetings in the past two years, and with but very few exceptions the dentists individually have done all in their power to make a success of the work, because they realize it is the only way the children will ever be treated in time to preserve their first permanent teeth, and it means abundant good business for all the dentists in the State to have a population thoroughly awake to the importance of dental preservation.

The tonsil and adenoid clinics were started also during the summer of 1918, and while we have only scratched the surface, so to speak, in this field, the results have abundantly justified the efforts. Our plans for this work are by no means perfected. We are forced to institute changes practically every day, but the general principle remains the

Digitized by Google

same. We are concerned only with school children. We do not classify them into well-to-do and indigent, because such classification is undemocratic, un-Christian and un-American. The poorest, sorriest, raggedest parent in North Carolina who has a child badly needing an operation for removal of tonsils and adenoids, we have found to be the last man in the State to agree to be classified as a pauper and have this service given him in a clinic arranged ostensibly for paupers, but we find that this class of people are easy to reach by being invited along with their more well-to-do neighbors to join a club in which those more well-to-do neighbors pay a small fee sufficient to cover the necessary cost in having an operation done in a clinic in which the specialist and the personnel are paid by the day. Our ideal here is to have something like 20 per cent admitted free of charge, having not even the specialist to know which children pay the fee and which do not. This has been done in every case attempted in this State this summer with one exception. In that case the specialist took particular pains to inquire about the standing of each parent with Dunn and Bradstreet. This particular specialist greatly feared that some man's child would be admitted to the clinic who could possibly, by placing a mortgage on the extra forty acres or by hauling another load of tan bark to town, scrape up a few more dollars and pay the full price demanded for this kind of work, thus failing utterly to take into consideration that it is not so much the matter of money as it is the matter of educating the people to the necessity for this operation for their children. Our ideal in this field is to establish an emergency hospital in every county seat town, whose doors may be opened and closed at will, where any day in the year a school nurse with proper assistance can get the service of a first-class specialist and arrange a club of fifteen or twenty operations for the children who will otherwise never get it.

The one platform I wish to emphasize in the strongest language possible in concluding this paper is that this is not charity work; it is strict business. The dentists and specialists and everyone concerned with these clinics, both surgical and dental, are amply paid for their services, and yet the opportunity is presented to children who would otherwise never be reached through a health-giving course of treatment, and often a life-saving operation. We welcome the children of the millionaire along with the pauper in the next cot. The whole thing

Digitized by Google

is on a democratic basis, which is pure applied Americanism, and means the giving of every child, physically speaking, an equal opportunity.

The majority of the best throat specialists in North Carolina have realized the importance of this work from an educational standpoint, and also its advantages to themselves and their profession, and they are loyally giving us their earnest support in this matter. The Section on Eye, Ear, Nose and Throat of the North Carolina Medical Society, at its recent meeting in April, adopted a resolution appointing a committee to confer with the State Board of Health in perfecting this plan of work.

The work is strictly ethical from a medical and a dental standpoint, it is humanity work of the first magnitude, and it is work which I hope to see developed in every state in the American Union. We will meet with narrow-minded men, and selfish people we will have to run over, but it is a move bottomed on necessity and the net fact remains that we have already reached about twenty thousand children in North Carolina within the last eighteen months who would never have been treated otherwise. This is sufficient evidence that this work has come to North Carolina to stay.

DISCUSSION

Dr. Cooper: The clearest illustration of our methods was demonstrated right here in East street yesterday at our clinic, in which we had twenty-one children operated on. Six of those children were from the suburban mill districts of this city. They have three splendid school nurses in Asheville. They have a splendid woman doctor, medical inspector of schools. They have done their utmost for three years to get those children operated on and worse cases of diseased throats I have never seen. They went to one man, who seemed to be a leader of the poor folks, if you please, and told him how these operations must be done. He said: "We can't go up town and pay two hundred dollars." Dr. Loed, the medical inspector said: "You don't have to pay it. We have already arranged and fixed with the specialist of this city to operate on them free of charge." She said: "We will take care of all the outside expenses. All you have to do is to go up to one of these hospitals where the county has a standing arrangement to pay the expenses." The man said: "Yes, and be put on the county books as paupers and have the specialist walk around and talk about operating on we paupers." If you will pardon the expression, he said, "Damn your charity. We don't want it." That has been three years ago and all the time since then the children have been growing worse. Yes, these children came in there with their parents along with some other people who were by no means paupers, I am glad to say, and we had cot by cot, side by side, the rich and the poor alike and no distinction made, and they were glad to do it, and this morning two more of those people down there came in and paid the fee

Digitized by Google

of $12.50. That is the amount that we charge because we have found if we get seventy-five per cent of the children in that can pay the $12.50 and fifteen to twenty patients a day we can pay all expenses, operate on twenty-five per cent free and break even. In other words, the clinic pays its own expenses. But there is the best illustration I have had of the effective necessity of that plan of work, they felt like they were welcome up there. It was a school child proposition. They came in on a democratic proposition. Now our ideal here is to have something like twenty per cent admitted free of charge.

Dr. Frances Sage Bradley of the Children's Bureau, Washington: I would like to ask what these children's clinics are doing by way of education. We have found the rural people very responsive to suggestion, to advice or to any form of educational work. During our stay for periods of weeks at a time in the homes of rural people we found it necessary to take our tooth brushes and paste with us during the day to prevent their becoming family property during our absence.

I feel sure that some way ought to be worked out to supply these children with such implements and encourage their use.

Dr. H. J. Gerstenberger, Cleveland: I would like to know what fees Dr. Cooper has to pay to a specialist in this group work.

Dr. Cooper: The educational work, as Dr. Bradley says, is the most important part of it. In other words, I figure that we send the nurse to follow up the preliminary examinations made by the teachers. Then we send a trained nurse in the county to follow up that work. According to population we put that nurse in the county anywhere from six weeks to three months. She visits, after classifying the cards, those that the teachers think defective. She classifies, or just separates the cards of the normal and abnormal and then she undertakes to visit in certain communities, central places in the summer time, when schools are not in session, having the children that are so reported brought to her for a more careful re-examination. In the winter we find it easier for her to visit the school. After she re-examines these children and finds that the work is necessary or that the teacher's opinion was correct, or otherwise, then she takes a look at the other children, but the most important part of her work is the teaching part and the mingling with the parents and children in the schools. The children confide symptoms to her and gather around and talk about these things and she gives a talk on the general plan of work on what we are striving to do, and on what is necessary for good health. In other words, I put the educational value of the nurse's work and the dentist's work who lectures to every child in his chair, to the parents around and in general meetings on the subject of oral hygiene at ninety-nine per cent. The clinic work is, of course, simply a feature that is doing something to show them what may be done. Now, let us see, the other question was as to the cost of these clinics.

The Chairman: The amount paid the specialist for the operation.

Dr. Cooper: Now just a minute. The dental work costs the children nothing and costs their parents nothing. The whole thing is financed by the State Board of Health, so far as the dental work goes. We accept under no circumstances whatso-

Digitized by Google

ever, any contribution from the children or their parents because there is danger there, and we let that alone, and the State Board of Health pays all that expense. Yet, we had, just before I left the office, from two counties where dentists are at work, notification that the local county board had appropriated enough money to continue the work of our dentists two more months under our direction in these counties.

Now in regard to the tonsil operation we pay the specialist a fee of one hundred dollars per day for his day's work. We pay all his railroad fares, his automobile expenses, his hotel bills and the expenses of the nurse who assists him. In other words he gets a hundred dollars net for his day's work. He is not concerned about the collection of money. He is not responsible for anything regarding the care of the children before or after the clinic. He is simply responsible for the operation. It relieves all burden from his mind about all these extras. We set our charge to the patient at $12.50 because we have found from experience over our state, that that is about sufficient for the expenses. Say we get fifteen patients a day. Our ideal is to try to get twelve of them to pay the $12.50. That is $150.00. We have to have two or three extra nurses for the day; we also have to have a janitor, a little milk bill, some ice and a lot of laundry done. That pays all these. Nothing is said to three of the children about any fee. They leave thinking perhaps that all of them come in free of charge. That is the way we want them to feel. Nothing is said about money anywhere to such children.

Digitized by Google

OPPORTUNITIES OF THE RURAL PUBLIC HEALTH NURSE TO DEVELOP CHILD HYGIENE

Mrs. RUTH A. DODD, R. N.,

In Charge, Child Hygiene, and Supervisor of Public Health Nursing, State Board of Health, Columbia, S. C.

Until recently, active interest in child hygiene in this country has been manifested principally by experts in scientific circles. It meant little to the masses that three hundred thousand babies die each year. It required the dramatic appeal of the War to arouse the people to a realization that an improvement in conditions under which children are reared, is imperative. The physical inefficiency of our young men as revealed by the draft, and the fact that during the War, the number of babies that died at home was greater than the number of men killed in battle, have accomplished more than years of educational work. The Children's Year Program of the Federal Children's Bureau, Surgeon-General Rupert Blue's recommendation of a public health nurse for every county, the Red Cross peace program which made public health nursing the cornerstone of all reconstruction work, delegating the responsibility to State, county and municipality, the influenza epidemic of last fall — each of these has created a demand for public health nursing. These combined agencies have given the movement such an impetus as it never could have had otherwise. And it is through the public health nurse that we may hope to make real progress in the development of child hygiene.

One great question which must arise in the establishment of a bureau of child hygiene, is how the rural people may best be reached. Educational propaganda alone will fail of this purpose. The bulk of this printed matter finds its way into the scrap basket unread, and the very people whom we are striving to reach are incapable of using the printed word. It is the history of prenatal and infant welfare centers that have been established in cities, that not more than one third of the mothers will attend them. Even more so must this be true in the scattered rural districts. If maternity hospitals are put within easy reach of the people, the rural mother, upon whom rests the responsibility

Digitized by Google

of holding the home together, can not be spared from the supervision of that home even for the bearing of her child. School inspection, if done by a physician with no follow up work, results in very few corrections and the instructive work in school and home is entirely lacking. The effort would seem to be useless without the visiting nurse to connect up the health center, the school and the home. Improvement of rural conditions must depend largely upon the visiting nurse. In a paper on rural obstetrics, Dr. Grace Meigs placed first in her plan for a solution of rural problems, a public health nursing service with headquarters in the county seat.

The work of the rural nurse must of necessity be both varied and complex. She cannot limit herself to any one specialty, for hers is a public health service that deals with all preventive measures and health problems. Her activities will include; prenatal work, infant welfare, supervision of bottle-fed and sick babies, instruction to classes of mothers and classes of midwives, supervision of tuberculous patients, improvement of sanitary conditions of homes, control of epidemics, physical inspection and the teaching of health principles in schools. It will be a long and weary road before the nurse can hope to compass all of these varied activities, and in the beginning, she must of necessity touch the work only in high spots. But we who are viewing the perspective, must have broad enough vision to plan to include eventually, all of these branches within her scope of activities. By selecting certain communities for intensive work, she may demonstrate by the bulk of work done there, and the bulk left undone, elsewhere, the need of more community nurses, and thus lead to the ultimate aim of a nurse for each school district.

I know, the advisability of allowing the nurse to enter the school is questioned by some. But if we fail to do this, we eliminate her greatest educational opportunity. The school seems to me the logical point of contact with the home, and it is the policy of our State Board of Health, that the nurse may do this inspection in the absence of a county health officer. But while she does inspect the school children and institutes corrective measures, these are the very least of her school duties. Better than dental clinics, is the use of the tooth brush. Better than sanatoria and scientific care of tuberculous patients, is the gospel of fresh air and good food and correct posture. If we would effectually and permanently lower the infant mortality rate, we must educate these

Digitized by Google

children, who are in a few years to become mothers and fathers. We must see that they are well grounded in health principles, and are taught the proper care of the baby, before this responsibility is thrust upon them. These children, so taught will be the nurse's strongest ally in the teaching of present mothers. The mother who would resent the suggestion that her family is poorly nourished, will be interested in the bright colored tag the child wears home with a record of his height, and a statement of the number of pounds he should weigh, and will enter heartily into the game of making Johnny catch up to Bill, who happens to be nearer the normal weight. The girl taught in school how to bathe and dress the baby and give it proper nourishment and sleep, can go home and demonstrate this teaching to the mother, when the same instruction from the nurse, would be regarded as unwarrantable interference.

One nurse when inspecting a school, remains in the neighborhood several days, and invites the mothers and the children of pre-school age to a meeting in the school, which results in a general conference for school children, babies and all. Another nurse gave a demonstration of school inspection before the School Improvement Society and the mothers became so interested that they begged her to remain in the neighborhood long enough to inspect the children of pre-school age. From that one meeting, the doors of more homes were opened to her, and more babies were put under her supervision than might have been possible with six months of individual visiting in homes. One nurse who has been located in a mill community of two thousand people for three years, reports that she now has only one bottle-fed baby in the community, and that during the last two summers, she has not had a baby with a bad case of dysentery. She attributes this success partly to the open air beds, on the order of kiddie-koops, which the mill management made for loaning purposes, and partly to the fact that the sum of $25 is given to the parents of each new baby, provided the mother is put under the care of a reputable physician early in pregnancy. Thus the ignorant midwife is eliminated and the baby given a good start from the beginning.

Now a brief report of our work in South Carolina: The General Assembly of 1919, established a Bureau of Child Hygiene with an appropriation of 10,000 dollars. The staff of the Bureau consists of a director, an assistant supervising nurse, and three field nurses. In

Digitized by Google

co-operation with the State Tuberculosis Association and the tuberculosis division of our own Department, two more nurses are available for demonstration work. Because a demand had been created for the services of a State supervising nurse, which the director of a bureau of child hygiene could not answer, the director of this Bureau was appointed State Supervisor of Public Health Nursing. As South Carolina is distinctly a rural State, our problems are rural problems. Believing the best way to promote the interests of the Bureau to be through county and community nurses located in various parts of the state, a part of our 10,000 dollars was apportioned in our budget for co-operative work with counties. Negotiations were then made with county delegations, with mill corporations, with chambers of commerce — with any agency and all agencies that might be interested in the employment of public health nurses. In June, the co-operation of the Red Cross was asked and granted, by reason of which, Red Cross funds were to be released throughout the State for the employment of nurses, all Red Cross nursing activities being placed under State Board of Health Supervision, the State supervising nurse being made the Red Cross representative for South Carolina. During the year our $10,000 dollar appropriation has been supplemented by $10,000 more from other sources, giving us $20,000 with which to work.

A child hygiene program was arranged for those counties employing nurses, this program being made broad enough to embrace every form of public health nursing.

Fifteen counties have employed county supervising nurses, whose duty it is, in addition to carrying out the child hygiene program, to establish health centers, stimulate activities for the employment of community nurses, and to develop county nursing units. Two of these units have been in operation since the first of August, Greenville with a staff of eleven nurses, and Chester with three. Splendid co-operation has been accorded, especially by mill corporations. In Greenville the mills have arranged with an eye specialist to make all necessary eye corrections. A request is now in from these mills to employ a dentist for dental clinics. In the city of Greenville, a tuberculosis clinic and two well-baby clinics, one for white and one for colored babies, are in operation. In three months' time the tuberculosis clinic has grown to such an extent that the physician in charge declares that it will be necessary to set apart two days each week for examinations. A hospital now

Digitized by Google

being built is to provide for a nose and throat clinic. Dentists are cooperating to the extent of giving their time for inspection of school children and for clinical work.

The midwife problem is a most difficult and gigantic one when we consider that twenty per cent of white mothers, and eighty per cent of colored, depend upon these dirty, ignorant negro women for care at a time when they should have the most skilled attention. The midwife cannot be eliminated. She must be made the best of a bad bargain. Neither can the midwife of South Carolina be mentioned in the same category with the midwife of New York or New Jersey. She is an entirely different proposition. In those states she makes midwifery a business and is paid for her services. In South Carolina she is usually the grandmother or grandaunt or old friend of the family who goes in to help in the emergency of child birth. When she becomes too old and too decrepit to be of any other use on earth she takes up midwifery. She cannot fill out a birth certificate because she cannot write her own name. She has no standards, her remuneration is negligible, and her number is legion. The fact that statistics show so few deaths to her account is a fallacy. When a complication arises she calls in a physician, too late to save the mother's life, the doctor fills out the death certificate and gets the credit.

Registration of these women has been begun in those counties employing nurses, and classes have been formed. The instruction consists principally of what not to do, and rules for ordinary cleanliness. In one of our southern counties, where the population is almost entirely colored, we have placed an efficient colored nurse. Her reports are most interesting. In one town the midwives refused to attend the classes; the nurse went to the local registrar and together they got a policeman and rounded up the bunch — a class of twenty.

This nurse at least succeeds in putting the fear of God in their souls. She says, "Now, ladies, you may think that you can break these rules and the State Board of Health will never know. But so sure as you do this it will be known and the policeman will be after you again." After the first lesson one old negro woman voluntarily removed her name from enrollment because she said she was too old to see how to treat the eyes and the cord as instructed.

At the last meeting of the executive committee of our State Board of Health a set of rules governing midwives was incorporated in our Sanitary Code making this supervision compulsory.

Digitized by Google

South Carolina was this year admitted to the birth registration area. This was no doubt partly due to stimulation from the Children's Year Program of the Federal Children's Bureau, and partly to a bulletin on Birth Registration, issued by our Bureau of Child Hygiene and mailed to physicians, registrars and clubwomen, together with a letter requesting their cooperation to this end. A number of prosecutions were also made by the Bureau of Vital Statistics.

The greatest handicap of this entire problem has been the lack of properly trained nursing material. Foreseeing this difficulty, in February four nurses were sent to the Richmond School of Social Service and Public Health. The supervisor of one of our units was sent to the University of Michigan and four are now in the Richmond school. A movement is on foot to organize Columbia and Richmond county for a training center, looking forward to the establishment of a public health training school in our own State. Believing it better to wait until properly trained nurses might be available, the assembling of our machinery and the organization of our work has seemed to progress slowly. Recently, however, returning overseas nurses have responded to our call, and during the last two months twenty-one well-qualified nurses have been located. Of these, two are Canadian trained, two are graduates of Columbia University, two from Simmons, one from University of Michigan and others were trained under such women as Miss Mary Beard and Miss Lent. During the year the number of nurses employed by various agencies has increased from thirty to seventy-five. Twenty-eight of these are under State Board of Health supervision.

When each State has an efficient public health nursing service, covering the entire State with a network of community nurses responsible to the county supervising nurse, and county supervisors responsible to the State Board of Health, then, and not until then, can we hope for an appreciable lowering of the infant mortality rate and the building up of an efficient citizenship.

DISCUSSION

Dr. Bradley: This seems a tremendously practical program for a rural state and would, it seems to me, be equally applicable to many of our southern states. We all recognize the fact that the midwife problem in this section of the country is quite a different proposition from that of the north and east. Mrs. Dodd deserves great credit for having secured such a corner on public health nurses. It is not strange there is such a shortage of nurses for other states.

Digitized by Google

I would like to tell you of an interesting incident we found in France of a marked reduction in infant mortality.

It was in the little village of Villiers le Duc near the great Chatillon forest where General Foch made his headquarters during the first battle of the Marne. Upon the request of the Red Cross I went with Doctor Mary Lapham of this state, to study the methods used in Villiers le Duc for controlling their infant mortality. We found a simple village of peasants in the foot hills of the Alps. There was no manufacturing or commercial industry other than the production of the most wonderful butter and cheese.

As in every French town all the men were at the front except those who were wounded or too old for military service. One of these was serving as deputy mayor and received us at the Mairie with great courtesy. We were greatly embarrassed when he showed us the painstaking care with which his birth and death records were kept for we were painfully reminded of similar towns in our own country where no such records are available.

We only had time to examine what the deputy mayor called recent records, back as far as 1854, when a certain Monsieur Morel was made mayor. He discovered from their vital statistics that about thirty babies out of every hundred died under one year of age, and calling the people together he assured them that they were more successful in raising lambs and calves than babies. He then worked out a certain simple but practical program which resulted in an annual reduction of their infant mortality from 30 to 20 per hundred.

Unfortunately Mayor Morel died and was succeeded by two other men in turn, neither of whom was interested in infant mortality and it steadily rose even higher than Monsieur Morel had found it. Following these two men came a son of the first mayor, and thoroughly believing in the practicability of his father's efforts he called the people together to discuss the village problem. They agreed to help him carry out the program he suggested. This consisted of reporting to him every pregnancy as soon as the woman was conscious of her condition; of breast feeding every baby for one year; of notifying him within twenty-four hours of any case of illness among young children and lastly of employing a physician from an adjoining town to come one day each week to Villiers le Duc for medical service to the entire village. He also insisted that the village own a small herd of cattle for the benefit of older children who might otherwise be stinted in their supply of milk.

The result of this simple, but rigorously enforced campaign was a steady reduction of infant mortality until for ten years before the war there was not one death of a child under two years of age in Villiers le Duc; not one death in confinement and but one still birth.

Unfortunately the record was broken in 1917 when the mother of a baby seven months old was tempted to sell her milk to the mother of another child. The baby thus deprived died and the villagers rose in righteous wrath against the woman who had broken her agreement, and whom they held personally responsible for the death of the baby. The incident was promptly reported to the present mayor who is the third of the family to serve in that capacity. He was a captain on the Macedonian front, but was not too busy to write home a letter which his deputy showed us,

Digitized by Google

regretting the death of the first baby in ten years but feeling sure that it would prove a practical lesson to the village that infant mortality is a preventable calamity.

This was an interesting example of what may be done even without medical or nursing service; with very little money and with none of the political machinery usually considered necessary for the accomplishment of municipal reform, and if it can be done in a little French village why not in the small towns which abound in this country, where doctors and nurses are unknown but where leadership can always be found.

Dr. Merrill Champion, State Department of Health, Boston: I should like to supplement what Dr. Bradley has said by saying that I believe that the well trained public health nurse is the one to be the leader. I should like also to emphasize something which has not been brought out very clearly: The urgent need of having our best trained public health nurses out in the country. It has come to be the custom I think, among both doctors and nurses, for the well trained ones to want to stay in the city, but I really believe if we are going to get results in the country, we shall be obliged to pick for that service the nurses who are able to do things of their own accord, who have initiative, and let the nurses without initiative go into the city where they can be under good supervision. The country nurse will really have to lead a lonely mental life, giving all the time and getting very little, but if she has the proper preliminary education and the right spirit, she will be doing more missionary work in one month than she could do in the city in a year.

Mrs. Jean T. Dillon, State Department of Health, Wheeling, West Virginia: I wish to supplement what Dr. Champion has just said, with the suggestion that those of us who are placing nurses in the rural districts make an effort to secure desirable living conditions for them. It is difficult to find good homes where people are willing to add another member to the household, and our county and district nurses are often forced to live in club houses of mining districts or lumber camps, or in miserable hotels in the small towns. If we can get the people of the country districts to realize something of the sacrifice a nurse must make in order to bring them this service, and to realize her need for normal social life and companionship, the difficulty in securing rural nurses will not be so great as it is now.

The Chairman: That is a very practical suggestion. Any further discussion?

Mrs. Morgan, Wisconsin State Board of Health: It seems to me that we could do a great deal in having local nurses take up the public health work. We are now, through the county health committees, trying to entice the nurses to take up the work with a view to going back to their own home districts where their own people are living, and where the nurse will be more satisfied. We have found this quite successful in a number of cases in procuring nurses for country districts.

Digitized by Google

THE MINNESOTA RURAL CLINIC

E. J. HUENEKENS, A. B., M. D.,
Minneapolis

At the last meeting of this Association in Chicago I presented an outline* of the program for child welfare clinics in the smaller towns of Minnesota, which were being conducted by the State Board of Health. At that time owing to the influenza epidemic, the work had been interrupted, and the program was largely a paper program, except for one clinic which for the past eighteen months had been conducted at three month intervals as an experiment. Since then practical experience and unforeseen events have forced certain changes, but on the whole the work has been a decided success.

Our plan of procedure was as follows: No clinic was given until a request from the local community came to us. We had expected that the popularizing of these clinics would take a long time, but fortunately the Children's Year program of the Children's Bureau was a great aid to us. The weighing and measuring of children in our state was well done. However, it was felt by everyone, including the women in charge of the work that this was not enough — that the weighing and measuring of children was not an end in itself but must serve as an awakening to the need of follow-up. As a piece of propaganda and advertising on a national scale, it was a great success. Our offer to give free clinics following the weighing and measuring was seized with avidity by the State Chairman of the Children's Year Committee. She communicated with all of her County Chairmen and advised them to write to the State Board of Health for clinics. We soon had almost more applications than we could handle.

When a request for a clinic was received detailed instructions were sent the local people advising them what kind of a meeting place was desired, the supplies needed, the number of volunteer assistants required, and suggestions as to the best means of advertising the clinic. This last included newspaper notices, placards in the local stores, announcements in the pulpits and public schools, and house-to-house canvass by block workers who had been organized in many towns.

Letters were sent to local physicians inviting them to attend the clinic and requesting their co-operation. It was explained to them that the clinics were primarily preventive, instructions being given the

* Archives of Pediatrics, Vol. XXXV, No. 12, Dec. 1918, pp. 718–722.
Transactions 9th Annual Meeting Am. Assoc. for Study and Prev. Infant Mortality Chicago, Dec. 5–7, 1918; pp. 189–193.

Digitized by Google

mother as to the diet of the infant with especial emphasis placed on the value of breast-feeding. Medical and surgical treatment was recommended, but the patient was referred to the family physician for such care. In a general way we have had the co-operation of the physicians, in many instances perhaps lukewarm, but we have met no direct opposition.

On the day of the clinic a State Board of Health physician and nurse examined all children up to six years of age, and in exceptional cases over that age. Specific directions were given as to feeding, for this purpose printed diet slips being employed. Mothers were encouraged to nurse their infants even though in many places this was in opposition to the advice of the local physician. While children up to six years of age were admitted to the clinics, infants under one year were most desired. We feel that the benefit derived from the education of the mother in the proper feeding of infants especially as to the value of breast-feeding is one of the most important parts of the work. General directions were given as to clothing, fresh air, and hygiene, but no prescriptions were issued. Recommendations as to dental care, operations of various kinds, and orthopædia appliances were made, but these, with a copy of the recommendation were turned over to the physician who in many cases was present at the clinic.

The local people were advised that such clinics should be held every three months. When the work was first instituted we made a condition of our return the employment by the community of a public health nurse to do the follow-up work. We were soon obliged to discontinue this as we found the demand for such nurses greater than the supply. However, the four months' course in public health nursing which has been conducted for the past year at the University of Minnesota is gradually remedying this shortage.

The influenza epidemic held up our work until March 1, 1919, but the number of clinics scheduled ahead at that time was so great that it was necessary to enlarge our force. The Division consisted of a medical director on half time, two full-time physicians, three nurses, and the requisite office help.

During the months of March, April, May and June, 88 clinics were conducted in the smaller towns of the state; 4,087 infants and children were examined — an average of about 45 children at each clinic. The recommendations in 3,500 of these cases have been summarized as follows:

Digitized by Google

NUMBER OF CLINICS FROM JULY 1, 1918, TO JUNE 1, 1919 — 78

Number of children examined — 3,449.

Age — 10 days to 14 years.

Majority of pre-school age.

PRESCRIBED RECOMMENDATIONS FROM PHYSICAL FINDINGS OF EXAMINING PHYSICIANS

Age	Diet	Operation	Teeth	Special*	No recommenda ion
Under 1 year	782	3	3	11	43
1 to 2 years	545	15	2	38	68
2 to 3 years	353	61	5	58	98
3 to 4 years	261	65	25	55	118
4 to 5 years	196	85	57	49	104
Over 5 years	161	167	115	96	99
Total	2,298	396	207	307	530
	66%	12%	6%	9%	15%

Eighty clinics were scheduled ahead for July, August and September, but in the meantime the legislature met and failed to appropriate money for the support of the Division. This was due to two causes; a private political feud and a rather reactionary type of legislature. In spite of this discouragement, because of the active demand throughout the state, this work is now being continued through the co-operation of the Minnesota Public Health Association and the Northwestern Pediatric Society. The Minnesota Public Health Association looks after the local arrangements and the financial end, while the Northwestern Pediatric Society supplies the technical medical services. The Public Health Association is a semi-public organization with Dr. H. W. Hill as executive secretary. Its funds are supplied by the sale of Red Cross seals; of the funds so raised eighty per cent must be spent in public health work in the county where the money is raised, ten per cent goes for the operating expenses of the State Association, and the remaining ten per cent to the National Organization. There are subsidiary county public health associations formed in each of the eighty-six counties of the state.

The clinics at present are conducted in practically the same manner as when under the State Board of Health, except that the County Public Health Association supplies the local initiative and funds. The clinics, instead of being conducted by full-time physicians, are given by volunteers from the Northwestern Pediatric Society, which includes

* Special refers to Wassermann tests, Von Pirquet tests, blood, urinalysis, etc.

Digitized by Google

in its membership all of the pediatricians of the State. These men are paid on a per diem basis.

Placing the Pediatric Society in charge of the clinics has been a strong factor in unifying the pediatricians of the State. Among other things, the feeding schedule for normal infants used by the State Board of Health has been altered in some minor details and is now officially indorsed by the Pediatric Society, which greatly simplifies our work. The official history sheet which has been adopted is unique in its searching inquiry into the breast-feeding history, and some valuable data should be gathered from these later on.

Since August first, when the Public Health Association took over the work, up to November first, 60 clinics have been given and nearly 40 are scheduled ahead. In 42 of these clinics 1,828 babies were examined — an average of 44 per clinic.

Discussion.— These clinics have now been in operation about one year and have fully demonstrated their value as an educational force, not only for mothers, but for physicians as well. While now being conducted very efficiently by the Public Health Association and the Northwestern Pediatric Society, the logical body to direct them is the State Board of Health with full-time physicians to make the examinations. Where an active pediatric society exists an advisory commission from such society should be a great aid.

The further we progress in this work the more we are convinced that these clinics cannot be conducted by local physicians, for the clinics would surely die of dissension and lack of interest. It is essential that the physicians conducting these clinics must be pediatricians, or at least primarily interested in pediatrics. The graduate schools in pediatrics of our universities are in a position to furnish such men as are needed. In the distant future, when we have full-time, thoroughly trained public health officers in these smaller communities (perhaps one in each county, as is advocated by the Minnesota State Board of Health) these clinics can be conducted locally.

There is no reason why this field should not be extended to cover prenatal work, maternal welfare and dental clinics. In fact, such work is now being organized in Minnesota to be operated jointly with, and along the same lines as the infants' and children's clinics. In their respective clinics the Minnesota Obstetrical Society and the Minnesota Dental Association will play the role which is taken by the Northwestern Pediatric Society.

Digitized by Google

We feel that we have demonstrated not only the popularity of these rural clinics, but also the urgent necessity for them. This need is both for the immediate advice given and for the educational value to the community at large. It is a work which women are especially fitted for and interested in, and with votes for women an accomplished fact no State should have any trouble in obtaining the necessary appropriation from the Legislature. With slight modifications to suit local conditions, there is no reason why such clinics cannot be put in operation in every State in the Union If the program of the United States Public Health Service becomes a law I look forward confidently to seeing a combination of State and Federal aid make this work universal.

To summarize the value of these clinics consists in:

1. The teaching of the proper feeding of infants and children, and the especial value of maternal nursing.
2. General hygienic instructions, the value of fresh air, sunshine and proper clothing.
3. The early recognition of defects before they are obvious to the parents.
4. The awakening of general interest in child health and child welfare.
5. Last, but not least, the education of physicians.

DISCUSSION

The Chairman: Will Dr. Rude open the discussion?

Dr. Anna Rude, The Children's Bureau, Washington: I am sure that Minnesota has approached an ideal in rural child welfare work that very few of us would have believed possible. I think it is rather difficult to conceive of a busy city expert ready to devote his time to rural child welfare clinics. Dr. Huenekens' paper emphasizes some very fundamental points in the solution of child welfare problems. I think he has shown us that lack of funds is no handicap. Minnesota at least seems not to have been handicapped in this way in spite of having no appropriation for this year's work. It all goes to prove what Dr. Bradley said, that it is a question of creating the interest, and as soon as you have the interest created, there will be found a way for carrying out the work. The second important point which Dr. Huenekens emphasizes, I think, is the value of cooperation not only between organizations but between all educators, since all preventive work is so largely an educational problem. He emphasizes also that in the present rapid popularization of child welfare, work, the work does need direction and standardization, and that you can hope for efficiency and success only through this cooperation and coordination. The educational value of these conferences cannot be overestimated. I use the word "conferences" or "consultations" in preference to "clinics," which generally speaking,

Digitized by Google

refers to a place for the sick child which obviously these children's conferences are not. They are intended for well children, so that we usually prefer to speak of these as "health centers" or "consultation centers" or "well-baby conferences." It is most important, as has been brought out in the Minnesota plan, that the work done at these conferences should be of a high standard. I am sure there is nothing more gratifying when working in a rural locality than to hear mothers say after we have examined the child, "Why, I had no idea it was going to be such a good examination." That is a very frequent comment. With the public educated in this respect, it really creates a demand which the medical profession will have to meet, and which I am positive it will meet, for we heard at the meeting of the American Medical Association in June that hereafter all medical college curicula will include a section on "preventive pediatrics." Another important part made by Dr. Huenekens is the value these centers have in serving as a nucleus for the extension of other work, and this is particularly true I think, regarding prenatal clinics in rural localities. There are very few localities which are really ready for prenatal work in spite of the great necessity for it; but it is possible to gain first the confidence of the parents through a well children's center so that a prenatal clinic is a very natural development. That has been demonstrated in very many places. You may be interested to know that in looking over some recent figures in our Bureau, taken from six different rural localities, in six different states, there were approximately three thousand cases, and out of that number there were exactly five mothers who had had what might be considered adequate prenatal care. Eighty per cent of them had had no care whatever.

One point which Dr. Huenekens has not touched upon is what Minnesota is doing in follow-up work after these conferences are held, and what facilities are being provided for helping the communities to care for the correctable defects which have been pointed out. It seems to me in this discussion that we could very profitably have an experience meeting on how different rural localities are meeting just this problem. I think that the most discouraging part of all rural work is the fact that even after you have told the parents that the child is not up to normal or needs corrective work done, there are no facilities to which to turn to have the work done.

Dr. Huenekens closes his paper with what seems perhaps an ideal remote of accomplishment and that is that he is looking forward to the time when state and federal aid will make child welfare work universally available. Now it is with just this vision that the Maternity and Infancy Bill is being fostered by the Children's Bureau. This bill, some of you may know, was introduced last year and passed its committee hearing, but it was so late in the session that it did not come up for further discussion before Congress. The bill has been reintroduced recently. The bill represents a voluntary effort for cooperation among three federal departments doing health work, by the organization of a Federal Board of Maternity and Infancy, which will be composed of the Commissioner of the Department of Education, the Surgeon General of the United States Public Health Service, the Secretary of Labor and the Chief of the Children's Bureau. The bill provides for an annual appropriation of ten thousand dollars to each state provided the plans of the state are approved by the Federal Board. It also provides for an additional appropriation according to population, provided that sum is matched by a state appropriation. That, as you

Digitized by Google

see, affords very liberal assistance, and has precedents only in the Educational Vocational bill. The bill in its redraft provides that these federal funds may be administered through the State Divisions of Child Hygiene or Child Welfare. When you realize that we now have thirty states that have divisions of child hygiene or divisions of child welfare, I am sure with this additional stimulation there will be no question that the other states will very rapidly create such divisions. It is almost impossible to realize that there are now thirty states organized or in process of organization to carry on intensive child welfare work, but with this awakening there can be no question but that we may all be thoroughly optimistic as to the future of child welfare in this country.

Chairman: I would like to ask Dr. Huenekens how much he pays the pediatricians per diem for holding the clinics, and second, whether these clinics are held in small villages or purely rural communities?

Dr. Gerstenberger: Mr. Chairman, I would like to congratulate Dr. Huenekens upon the wonderful work he has done in Minneapolis, and I think he is very wise in insisting that this work ultimately will be a government function. I should also like to just mention the availability of automobile clinics for rural work. During the war a great number of motorized dental clinics and infant welfare clinics were made in this country and sent abroad, and that stimulated the President of the Children's Year Committee in Cleveland, Mr. Chisholm, who has since died, a very fine man, whose loss we greatly regret, to give an automobile for that work. Such an automobile was used around Cleveland during this past summer, with a couple of nurses and a physician traveling with the machine which went in the little communities and gave regular clinics. The automobile was completely equipped with running water, light, table, etc. It also had an extra room which could be used as a demonstration room or undressing room and at the top of the machine there was a standard for moving picture exposures. A motorized clinic of that sort could be used very well in this rural work.

Chairman: That idea that this work will pass and pass very rapidly to the shoulders of the tax payer is too important for the state or the county or the government to overlook. I think it is certain to develop very rapidly. I am tremendously impressed with the possibilities of the rural clinic as outlined by Dr. Huenekens for our own state, and it seems to me that it could be developed very easily in connection with the rural health nursing program so well outlined by Mrs. Dodd of South Carolina.

Is there any further discussion?

Dr. Champion: I promised Dr. Huenekens to say a word as to how the Massachusetts scheme for rural clinics compares with that of Minnesota. May I first say that I congratulate Dr. Huenekens on the ideas expressed in his paper. I feel that the principal of his clinic is exactly right. I was glad to hear that this clinic was entirely a prophylactic one rather than one for treatment. In this respect I am afraid that I shall have to differ with the ideas Dr. Cooper expressed. I admire his courage but rather doubt the wisdom of carrying on treatment clinics at the present time. Our plan in Massachusetts has not got quite so far as the Minnesota one. Last year we employed a physician for the period of the rural fairs. We had a tent and an automobile of our own; with these our

Digitized by Google

physician traveled about holding clinics similar to those the State Board of Health of Minnesota had. Even before that, however, we had in isolated instances held clinics of the same sort in some of the small country towns. We were very successful in getting the cooperation of the general practitioner. I think that that is a very important element. We always took pains, after the examination was over, to see that the visiting nurse in the neighborhood got the names of the cases which needed following up.

I feel that ultimately, with the extension of the health center idea a great many of our problems of this sort will be solved. I may say that we are asking our legislature this year for an appropriation to make a traveling rural clinic a permanent procedure.

Dr. Florence B. Sherbon, Division of Child Hygiene, State Department of Health, Topeka, Kansas: This effort to extend the physical examination of all children into all parts of our country is going along with tremendous rapidity, and I am wondering if the time isn't ripe and if it isn't a function of this Association to make an active attempt to standardize methods and particularly perhaps at this time to do a little towards standardizing terminology. We have used the terms "clinic" and "conference" and "station" and "center" interchangeably in our discussions here, and I believe that we should go on record as defining these terms. Possibly we might decide that we will use the term "station" to apply only to places where research is done; "centers" to permanent consultation centers; "clinics" only to places where treatment is given, free or otherwise; "conferences" to cases where we hold temporary meetings for the purpose of examining children and advising mothers. I do feel that we should be a little more clear in our use of terms and this clearance in the use of terms will help us reach clearance in method.

Chairman: Dr. Huenekens, will you close the discussion?

Dr. Huenekens: The Minnesota pediatrician's services are evidently not as valuable as the North Carolina nose and throat specialist. He receives but $25 a day. The places where we hold these clinics are the smaller towns and when we return to the same county, we plan not to return to the same small town or city where we have given these clinics before, so that we tend to go to some of the very rural communities. In these places our clinics are not so successful as to numbers at least. Perhaps they are most successful in other ways. Some of the most successful clinics are up in the Minnesota iron range where the living conditions and general ignorance of the population is appalling, and the numbers were not great, but we felt we did the greater amount of good than any other place in the State. What Dr. Rude said about the new law being advocated by the Children's Bureau — I think the modification they have made in the law this year very greatly improves it in that the work is to be done under the Child Welfare Divisions of the state boards of health, which provision was not in the previous law and that is a very important difference and greatly improves the law.

Another thing that we are doing now that we didn't in the beginning. On our history sheets we take the names of the family physician of each baby that is brought there and that family physician receives a copy of our record, the whole record so that in that way we feel that we are better able to get the confidence and the cooperation of the physician.

Digitized by Google

AFFILIATED SOCIETIES

REPORTS

253

Digitized by Google

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

(FORMERLY THE)

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

(Headquarters 1211 Cathedral Street, Baltimore, Maryland)

SUGGESTED OUTLINE FOR REPORT OF AFFILIATED SOCIETIES FOR YEAR ENDING SEPTEMBER 30, 1919.

Reports were asked of the Affiliated Societies in accordance with Article X of the By-laws. The outline given below was intended to be suggestive only and the societies were asked to include brief descriptions of distinctive features of their work in their reports. Unless otherwise indicated, the statistics are for the year ending September 30, 1919.

The reports which follow give some idea of the trend of the activities in the sections represented. The marginal figures in the reports refer to corresponding ones in the outline.

Name and address of organization.
When organized.

I. Medical and Nursing Staff.
- Under normal conditions how many doctors and nurses are on your staff?
  - Nurses?
  - Doctors?
    - Number who were paid for their services?
    - Number who gave their services without charge?

II. Financial.
- Total budget for the current fiscal year?
- How is your organization supported?
  - By membership dues?
  - By appropriation from city or state?
  - By special contributions?
  - What method or methods have you found most successful in raising funds?
- Is the work that is done by your association given free of charge or do you ask a fee or contribution?
- Amount of fee if one is asked?
- If your services are rendered without charge, do you find that the mothers, whose financial circumstances have been improved by the advance in wages, continue to attend your conferences and ask your advice?
- What has been the effect if a charge has been made for your services?

III. Problems in Maternal Welfare and Child Hygiene.
- What have been the most difficult problems you have had to solve during the past year?
- As a result of after-the-war conditions, have you found it necessary or desirable to make changes in your work? Have you enlarged the scope of your work or made changes in your method of procedure? If so, along what line?

Digitized by Google

IV. Outline of Activities.

What work are you doing regularly along the following lines:—
- Prenatal and maternal care.
- Infant care.
- Preschool age.
- School age and adolescence.
- Nutritional clinics.

Are your activities limited to your own city or town, or do you carry on county or state work, in connection with the work of your local organization?

If you are engaged in state-wide work, what are your most difficult rural problems?

V. Affiliations.

In what way does the work of your Association couple up with that of other local organizations?

With hospitals, or medical schools?

With relief organizations?

With the city or state department of health?

Have you a division of child hygiene in your city? In your state?

VI. Results of Children's Year Campaign.

If your organization conducted examinations of babies and children according to the Children's Bureau plan, have you undertaken any follow up work?

What results have you noted in regard to—
- Improved health.
- Increased weight of the children.
- Intelligent care on the part of mothers.
- Community interest in the health of the children, as shown by the establishment of nutritional clinics, a greater number of welfare conferences, and increased medical and nursing staff?

VII. Effect of General Advance of Wages Upon Standards of Living; Upon Health and General Welfare of Mothers and Children.

What has been the effect of the general advance in wages upon the standards of living of the families with which your organization is in touch?

What effect has the advance in wages had upon the health and general welfare of the babies?

Has there been less illness among the babies?

Has there been less illness among the older children, as a result of the easier financial circumstances of the families?

What effect has the advance in wages had upon the care which is given by the colored mothers to their infants and young children?

What effect has it had upon the care given by the mothers of foreign birth? (Please state nationality of the groups of mothers—for instance, Russian, Polish, Lithuanian, etc., in answering this question.)

VIII. Wages and the Milk Situation.

Has the amount of milk bought for babies and children increased or decreased?

Digitized by Google

IX. Statistical.

A. Prenatal Care.

Total number of mothers cared for during the year?
Average number of months under care?
Total death of mothers —
During pregnancy.
At childbirth.
During the puerperium.
Total number of infant deaths —
At birth.
During first month.
During the first year of life.
During what month of pregnancy do the women come under your care?
Average cases.
Earliest case.

B. Midwives.

Approximate percentage of births in your city or town attended by midwives?
Percentage of babies on your roll whose births were attended by midwives?

C. Postnatal care. Infant care. Pre-school age and older children.

Age limit of babies or young children under care?
Total number under 1 year cared for?
Total number between 1 and 5 years cared for?
Total number of older children? (Please indicate age periods.)
Total number of infant welfare conferences each week?
Average number of babies in attendance each week?
How early in the child's life is it brought under your care?
Average cases.
Earliest case.
What percentage of babies born in your city or town during the calendar year or during your fiscal year came under the supervision of your organization?
What percentage of the babies born within the last calendar year, in the districts covered by your organization, have come under the supervision of your association?

D. Total births in your city or town for year ending December 31, 1918?
Total deaths under 1 year in your city or town for year ending December 31, 1918?
What percentage of the deaths under 1 year that occurred during the last calendar year in the districts covered by your association were *not* on the rolls of your association?
Has there been an increase in the death rate among children under 1 year in your city or town in the last year?

X. Recommendations.

Digitized by Google

CANADA

BABIES' DISPENSARY GUILD, INC.

Hamilton, Ontario

Organized June, 1911.

I. Doctors, 12; nurses, 3 in winter and 4 during summer. None of our doctors receive remuneration.

II. Total budget for current fiscal year, $6,158.74. Our organization is supported by private subscriptions, membership fees, and a small pro rata grant from the city (three cents per day per baby). All advice and service given free of charge. There has been no noticeable change in the attendance of the mothers whose financial circumstances have improved.

III. Our greatest problem is how to enlarge the scope of our work without financial increase. Our methods have not changed but it is felt the scope of our work should be enlarged. To this end arrangements had been made for a campaign for funds early in June, but later this date was considered inopportune and the campaign was postponed until October. We hope with the proceeds to erect a new building for our headquarters and to establish our long hoped for prenatal clinic.

IV. Our work is still confined to infant feeding and home visiting, and our activities limited to our own city.

V. We have no affiliations with other organizations, but have the co-operation of the Hospital, City Relief Association and Health Department. All babies under two years are referred to us on discharge from the hospital. Needy families discovered by nurses during their visiting are referred by us to the relief. The Health Department take care of unsanitary conditions reported by the nursing staff. We have no division of Child Hygiene in our city.

VI. We did not participate in Children's Year Campaign.

VII. While there has been increased wages, there has been no increase in the margin, the cost of living more than keeping pace with the increasing wages.

VIII. There has been no appreciable difference in amount of milk bought.

IX. We care for babies under 2 years of age. Total number of infants cared for during year, 718. There are 7 Infant Welfare Clinics held weekly. The average number of babies in attendance each week, 98. The average age at which a baby enters is 5½ months. The youngest baby entered was 5 days old.

X. Total births in city for year ending December, 1918, 2,903. Total deaths under 1 year, 305; 96 per cent of deaths were not on the rolls of our Association. There has been an increase in death rate among children under 1 year in our city. Last year's figures being 281 against 305 of this year.

HELEN HULME, R. N., *Acting Supervising Nurse*

AFFILIATED BABY WELFARE STATIONS (ENGLISH)

Montreal

Organized 1917.

I. Staff: Nurses, 12; doctors, 14; nurses only are paid.

II. Total budget approximately $40,000. Received from membership dues, supplemented by an appropriation from the city and by special contributions. The most successful methods of raising funds have been found to be by direct appeals, Tag Day, and theatrical benefits. The work done by the Association is free of

Digitized by Google

charge. The establishment of "Pay Clinics" is under consideration. Mothers, whose financial circumstances have been improved by the advance in wages, continue to attend the conferences.

III. The financial problem has been the most difficult one during the year. The scope of the work has been enlarged as the need has been demonstrated by the field activities of our "Travelling Health Center."

IV. Special emphasis is laid on prenatal and maternal care and infant care. The Association is considering the establishment of nutritional clinics, but at present is not carrying on any work for children of pre-school age, or school age and adolescence. Our activities are limited to Montreal.

V. Affiliation: We co-operate with other organizations in Montreal, especially with hospitals, medical schools and relief organizations. We have a Division of Child Hygiene in the city, but none in the Province.

VII. No effect has been noticeable upon the standards of living from the advance of wages, because the increased wages have been nullified by the high cost of living.

IX. Postnatal care: Age limit of babies under the care of the Association is 2 years. Total number under 1 year cared for, approximately, 1,200. Total number of infant welfare conferences each week, 22. Average age at which the babies are brought under the care of the Association, 4 to 6 months; earliest cases, birth. Approximately 2 per cent of the babies born in the city during the calendar year come under the supervision of the stations. Total deaths under 1 year for the year ending December 31, 1918, 3,902. Total deaths for same period of 1917, 3,448. The infant mortality rate in Montreal for 1917 was 178 per 1,000 live births; the rate for 1918 was 192 per 1,000 live births.

W. A. L. STYLES, M. D., *President*

BUREAU OF CHILD WELFARE, PROVINCIAL BOARD OF HEALTH

Toronto

During the year which has passed since the Chicago meeting, the Bureau has not been able to undertake much new work, our efforts being mainly along the line of education and propaganda through the Child Welfare Exhibit. This was shown in many cities and towns during 1919, also at many Exhibitions and Fall Fairs, the chief of which was the Canadian National Exhibition held in Toronto in September, the attendance being 1,200,000. Because the Board of Directors had allotted us a space of fair proportions (approximately 90 feet long by 65 feet wide) we were able to make a very creditable showing. Special features which might be mentioned were (1) a Health Clown, "Chin-Chin," who weighed the children over six years of age and served as a feeder to the school age clinic; (2) demonstrations in baby care by trained nurse; (3) section on foods in which were shown actual dietaries for children of various ages, under supervision of a dietitian. Through the co-operation of the Department of Public Health of the City of Toronto medical clinics for pre-school and school age children, as well as dental clinics, were conducted every afternoon of the Exhibition which lasted for two weeks.

It is, however, with a fair amount of satisfaction that we have at least one small piece of intensive work to report. Upon request, our nurse spent the month of October in a small town in which lumbering is the chief industry. There were two doctors but no hospital or resident nurse, and in the short demonstration given, our nurse confined her effort mainly to visiting nursing, prenatal visits to mothers

Digitized by Google

in their homes, and holding of child welfare conferences on certain mornings each week. She also helped in emergency work and gave talks to mothers in a nearby rural school. At a meeting of the Women's Institute held on the last day of the nurse's visit, the members pledged themselves to bear one-half of the salary of a nurse for the community.

MARY POWER, *Director, Bureau of Child Welfare*

CALIFORNIA

THE BABY HOSPITAL ASSOCIATION OF ALAMEDA COUNTY

Oakland

We have a main clinic where all branches of infant work are carried on, and we have established Well Baby Stations through the county. At present there are three of these stations, but we hope soon to increase the number. All children must be under school age to be accepted in our clinic, those of school age being sent to another clinic under the direction of the school nurse.

The Well Babies Conferences are held once a week and are conducted along lines of similar clinics elsewhere. The attendance at these clinics is large and is steadily increasing. The visiting nurses follow up all cases where there is doubt about the instruction being carried out or where a mother with her first baby needs a little help in the preparation of the formula.

Our maternity clinic cares for the expectant mother before the birth of the baby, furnishes a nurse and doctor at the time of confinement and has the visiting nurse supervise the care of the mother and baby for two weeks after the confinement. At the end of two weeks the baby is registered in the Well Babies Clinic and from then on until it reaches school age it is under the care of our clinic and our visiting nurses. A fee of $15 is charged for this maternity service. No patient is refused however, because of inability to pay, but many are refused who are not willing to make any effort to live up to the standards set for them and the babies.

In the medical clinics we have rather a unique method of collecting fees. Instead of charging a small sum for each visit we have a membership fee of one dollar which is good for six months' clinic service. When the dollar is paid a membership card is given the mother. This card is presented — shown each time the child comes to the clinic and from it we get the chart number. This method saves a great deal of time and confusion. Our income from this membership is about equal to what we would collect from the small sums at each visit. Our average monthly attendance is about 1,100 (calls) which represents about 450 children and our income is about an average of $350. As we have so many of the dependent children from the County and the Associated Charities to whom we have to give a free card our income is not as great as it should be in proportion to the number of children we have as if we could collect from all.

We have five visiting nurses on our staff, two for maternity and three for the babies. Our territory includes the whole county; this is districted and each nurse takes a district. Our clinic is the only one this side of the Bay that does infant work exclusively. Our doctors, as far as we can get them are trained children's specialists. The hospital with which this clinic is connected has about thirty-six beds, all free cases entering the hospital must come through the clinic. When a case is discharged from the hospital the visiting nurse is notified and a visit is made immediately to see if the treatment is being carried out and that the home is in proper condition to receive the baby.

BERTHA WRIGHT, *Supervising Nurse.*

Digitized by Google

BABY HYGIENE COMMITTEE OF THE ASSOCIATION OF COLLEGIATE ALUMNAE

San Francisco

The Baby Hygiene Committee of the Association of Collegiate Alumnae was organized in 1909 as the Certified Milk Fund Committee of A. C. A.

There are four doctors on the staff. Dr. Adelaide Brown gives the prenatal talks; Dr. Florence Holsclaw is in charge of the two well-baby nutritional conferences, one for mothers with their own babies, the other the Associated Charities foster mothers' conference. Dr. Ethel Owens is assisting at the latter. Dr. Ellen Stadtmuller is starting the "Runabout" conference for children of pre-school age. These doctors give their services.

There is one visitor who does the follow-up work for the two mothers' conferences, the Associated Charities foster home being under the instruction of their own visiting nurse.

The work done by the Baby Hygiene Committee of A. C. A. is instructional and educational — to keep babies well. It is an advisory feeding center. There is no fee attached to it. It touches a group of mothers who are independent and self-respecting, who have enough to pay their doctor for illness or emergency, but who desire the continual weighing and watching of their babies from week to week.

We have enlarged the scope of the work to include the prenatal lectures and the "Runabout" conference, for during the Children's Year Drive it was found that there was a need for the proper instruction in feeding and habits of these children particularly.

The prenatal lectures are held once a week, repeated each month, covering prenatal care; preparation for a confinement at home or any sick bed; baby's outfit, bed, bath, exercise; and a routine day. There is no examination or care given.

The well-baby nutritional conferences are held once a week for infants, with follow-up work to instruct in formula making and general care and hygiene. There have been 195 new babies on the list in 10 months and 155 are still attending.

The "Runabout" conferences are held once a week to instruct in diet. The follow-up work shows irregular habits among the toddlers. There are 14 children in the 2 months.

The Associated Charities conferences are held once a week.

At all of these conferences volunteers weigh, measure, help the mothers and assist the doctor.

The work is carried on in San Francisco, but children are brought in from outlying towns and Alameda county. There is an Alameda County Branch of the Baby Hygiene Committee of A. C. A., but they have not organized a Health Center.

The work of the Baby Hygiene Committee of A. C. A. is coupled up with the hospital clinics and organizations doing Child Welfare Work. The Red Cross Home Service Department, the Board of Health Placing Out Department, and the Native Sons and Daughters Central Committee on Homeless Children send their mothers and foster mothers with their babies to the nutritional conferences.

Students from the Stanford and University of California medical schools attend Dr. Holsclaw's infant nutritional conferences as part of their pediatric instruction.

California has passed a bill this year to organize a State Child Hygiene Bureau. There is no city Child Hygiene Division.

During the Children's Year, weighing, measuring, and examining was put into the hands of the hospitals or organizations equipped to handle it in the various neighborhoods, and the follow-up work was a matter of what each center could do in its particular section. The San Bruno Settlement followed up every case; the Telegraph Hill Settlement visited many. New well-baby health centers have been opened at Mt. Zion and Children's Hospitals and San Bruno Settlement. The Board of Health is making plans to open a center in an isolated district. We can safely say that interest in the health of children has been aroused by the Children's

Digitized by Google

Year Program, and many undercurrents which will soon be realities show that there is keen interest in having health centers in every district of the city within reach of all.

The milk situation in San Francisco is critical. The price has gone up so high that it may be necessary to handle it as a public utility.

In San Francisco 10 per cent of the births are attended by midwives; all the Japanese, many of the Italians and Russians. The total births for the year ending December 31, 1918, 8,466. The total deaths under 1 year ending December 31, 1918, 484. There has been a decrease in the death rate among children under 1 year in the past year in spite of the influenza. Age limit of children under our care, 6. Total number under 1 year, 339. Total number between 1 and 5 years, 117. Total number of welfare conferences each week, 3. Average number of babies attending each week, 58. How early in child's life is it brought under our care? Average cases, 6 weeks and 4 months. Earliest case, 3 weeks.

The financial report for the fiscal year follows:

Deposits

Balance as of September 1, 1918		$1,649.92
Subscriptions		2,230.09
Red stockings		822.81
Children's Year		979.04
		$5,681.86

Disbursements

Associated Charities, milk	$1,410.00	
Telegraph Hill, milk	100.00	
Rent	360.00	
Red stockings	63.21	
General expense	257.17	
Anna Van Winkle (salary and expenses)	614.80	
Children's Year	938.16	
323 Haight St.	114.64	
Postage	3.10	
Printing	141.49	
		4,002.57
Credit balance September 1, 1919		$1,679.29

ANNA VAN WINKLE, *Secretary-Vistor.*

CONNECTICUT

VISITING NURSE ASSOCIATION

New Haven

Our largest piece of work, just being completed for 1919, is our follow-up work after the baby weighing campaign a year ago last June, but at this late day we have found many things which have made us glad we did this work.

We had one nurse do the follow-up work. We have two new stations which make a total of 8 and started 1 conference for children between 2 and 6 years. We have added 2 nurses to our staff, making a total of 12. The work has increased about as usual.

C. M. GILBERT, R. N., *Supervisor, Child Welfare Department.*

Digitized by Google

VISITING NURSES ASSOCIATION

Waterbury

I. Staff: Nurses, 1 superintendent, 10 staff nurses, 1 registrar, 2 pupil nurses; doctors, none paid, 5 volunteers (Baby Welfare Stations).

II. Budget: Association, $14,453.83; Baby Welfare Association, $6,112.02; Nurses' Home, $3,574.38. Baby Welfare Association receives $500 from city. Association is supported by subscriptions.

III. Fees: Patients are encouraged to pay for visits, if possible. From 5 to 50 cents is asked.

IV. Activities: Prenatal nursing and advice; making monthly visits and urinalysis; post-partum care; monthly visits to all children under 2 years of age; 3 Baby Welfare Stations with 2 clinics each every week; work is confined to city limits.

V. Affiliations: Bedside Nursing for Anti-Tuberculosis League; nursing for industrial policy holders of the Metropolitan Life Insurance Company; Waterbury Hospital sends us two pupil nurses for two months' experience in district nursing; co-operate with all local relief association. Our Association is doing all the child hygiene nursing in the city.

VI. Results of Children's Year Campaign: Weighing campaign was conducted in August, 1918, under the Committee of Public Health of the Council of National Defense, Woman's Section, the actual work of weighing the babies being done by this Association. Our Association is not large enough to handle all the children weighed, and we have continued with our old plan of visiting all children under 2 years of age. We have organized 2 Welfare Stations in the last 2 years, giving us a total of 3.

VII. Housing conditions have been deplorable, brought on by large increase in population and influx of women workers in the munition factories. Increase in wages did nothing to improve the situation.

VIII. Sale of milk in the Welfare Stations increased about 6,000 quarts in the last year.

IX. Statistical:

Prenatal Care:

Total number of mothers under care during the year: 68 did not receive post-partum care; 387 received prenatal and post-partum care; 5 deaths (new born); 31 deaths under 2 years of age.

The majority of the women come under our care during the fourth month of pregnancy.

Postnatal Care:

Infant Care:

Age limit, 2 years.

Total number of babies under 1 year cared for, Well Baby roll, 862; requiring nursing care, 296; nursing cases under 2 years, 736.

Well Baby roll under 2 years, 1,654.

Total number from 2 to 5 years cared for, 324.

Total number from 5 to 9 years cared for, 448.

Total number of Infant Welfare Conferences per week, 6.

Thirty per cent of the babies born during the last year have come under the supervision of our Association — well babies, 862; new borns, 296.

Total births in Waterbury for year ending December 31, 1918, 3,360.

Total deaths under 1 year for year ending December 31, 1918, 405.

Death rate is gradually decreasing in Waterbury, 122.8 in 1915, and 104.6 in 1917.

EMMA SPRENKLE, R. N., *Superintendent*

Digitized by Google

DELAWARE

CHILD WELFARE RECONSTRUCTION COMMISSION

Wilmington

The Reconstruction Commission of the State of Delaware really is a Child Welfare Commission. It was created by the act of the State legislature last year and it is charged with the duty of devising and developing projects for all branches of child welfare. It is also expected to draw up and present a children's code to the 1921 legislature. As the Commission is still very young, and its plans are not fully formulated, it is not possible to make a very concrete report at this time, excepting to tell you there is such a Commission in existence and that it will carry on what work was started in Delaware during Children's Year. As a matter of fact, this Commission is the outgrowth of the work of the Children's Year Committee. Among some other things the Children's Year Committee did in Delaware in a very short time, and in a very splendid way, was to open a considerable number of children's health centers, and the Commission expects to continue to operate them. The Commission will also start some child welfare projects in other lines as well as along health lines. An effort will be made to do as well rounded and as comprehensive a piece of work as possible.

MRS. I. J. N. PERKINS, *Director*

DISTRICT OF COLUMBIA

THE WASHINGTON DIET KITCHEN ASSOCIATION

Organized, 1901; incorporated, 1914.

I. Nursing staff, 13; doctor (director) 1, salaried; 22 doctors, services free.

II. Total budget for current year, $25,000. Organization supported by membership dues, by $15,000 appropriation from Congress, and by special contributions. Fairs and balls have been our most successful methods for raising funds. The giving of fees by mothers from 5 to 25 cents is encouraged.

III. Securing expectant mothers in the *early* months of pregnancy has been the most difficult problem. We have not found it necessary to make changes in our work as a result of the war. We have enlarged the scope of our work, in so far as the children of pre-school age are now included and an intensive campaign is planned for a physical survey.

IV. Outline of activities:

Prenatal — only.
Infant care — conference and home visiting.
Pre-school age — conference and home visiting.
We have no nutrition clinics, at present.
Our activities are limited to the city.

V. Affiliations: Suitable cases are referred to hospitals for treatment; hospitals refer to us their new births. Clinics are also held for medical students. We co-operate very closely with relief organizations. The District Department of Health notifies us of all midwife and student cases. There is no division of child hygiene in the District.

VI. Follow-up work is being conducted of babies examined according to the Children's Bureau plan. No marked results have been noted in regard to improved health, but much interest has been aroused in mothers in the care of their children. Community interest has been shown by the increased nursing staff.

VII. Increased advance of wages has slightly bettered the living conditions of the families of our conferences. No marked effect has been seen on the health and

Digitized by Google

general welfare of the babies. There has been less illness among the babies, but no marked decrease among the older children. Advance of wages has greatly lessened the care of colored infants and children. Practically all under our supervision are American families.

VIII. Amount of milk purchased for infants has decreased.

IX. Statistical:

A. Number of mothers cared for during the year, 242.
Average months under care, about 3.
Total deaths of mothers, 3.
At child-birth, 2.
During the puerperium, 1.
The sixth month is the average time when pregnant women come under our care. The earliest case is 2½ months.

B. The approximate percentage of births in the District attended by midwives is 5.63. All these cases are referred for follow-up work.

C. Age limit of babies or young children under care, 6 years.
Total number under 2 years cared for, 2,624.
Total number between 2 and 6 years cared for, 786.
Total number of Infant Welfare Conferences each week, 14.
Average number of babies in attendance each month, 1,670.
4 to 5 months is average age when a child is brought under our care. Earliest case, 3 days.
31.9 per cent of babies born during 1918 came under our supervision.
The percentage of the previous year being 27.

D. Total births in our city for year ending December 30, 1918, was 8,221.
Total deaths under 1 year in our city for year ending December 30, 1918, was 912.
Death rate among children under 1 year in our city during 1917 was 97 per 1,000 births. During 1918, 111 per 1,000 births.
2.8 per cent of deaths under 1 year, that occurred during last calendar year, were on our rolls.

X. Recommendations: That compliance with the accepted standards of the care of infants be made compulsory.

HARRY S. BERNTON, M. D., *Director*

HAWAII

WOMEN'S CENTRAL COMMITTEE ON CHILD WELFARE

Honolulu

Organized, January, 1914.

I. No medical or nursing staff.

II. No budget: Supported by dues amounting to $5 from societies, and fifty cents from individuals. Funds are raised by solicitation through newspaper. Work is done without charge. Delegates from other societies and individual contributors attend monthly meetings.

III. Our most difficult rural problem is to find enough women who are not over-worked already.

IV. We have put through a bill for a Commission to Investigate Feeble-Mindedness at the special session of our Legislature and at the regular session, we put through a bill appropriating $60,000 and 500 acres of Government land for a home for feeble-minded.

After-war conditions have not made it necessary to change our work.

Activities include the Y. W. C. A. Palama Settlement, and the Free Kinder-

Digitized by Google

garten. Our organization has branches at Waialua, Oahu, Hamakuapoko, Maui, Lihue Kauai.

V. Ours is a central committee to which organizations send delegates. We work under and through the Board of Health.

VI. We conducted a weighing and measuring campaign of children under school age, sending 2,000 cards to Washington as the fruit of our labor. The Board of Health has taken over our experimental feeding of poorly nourished school children and with a present of twleve standard scales, is formulating a standard for Japanese, Chinese, Hawaiian, Korean, Filipino and Portuguese children. We are also backing the Board of Health financially as their appropriation for school lunches is too small. We are now collecting at least $150 a month as our share. Pronounced improvement is shown in all directions.

MRS. FREDERICK E. STEERE, *Secretary*

ILLINOIS

CHICAGO LYING-IN HOSPITAL AND DISPENSARY

I. Staff: We have 17 graduate nurses on the staff. We have 9 or 10 doctors acting as internes who are paid a slight amount for their services. Our attending staff, numbering 17, give their services without charge.

II. Financial: Our total disbursements for the year ending the 30th of June, 1919, were $186,701.99. Our organization is supported partly by membership dues, partly by special contributions, and partly by hospital fees. The work in the hospital last year was 18 per cent absolutely free, 52 per cent part-pay and 30 per cent pay. We make no charge in our Out-Department, but we do ask the women if they can afford to make a donation to the Dispensary. This donation generally varies from $1 to $5, and of course is only given by a small number of the patients. We have found that the mothers whose financial circumstances have been improved by the advance in wages continue to attend our clinics, and ask advice, but call a private doctor for their confinement. Our Out-Department work has lessened 40 per cent since immigration has ceased and wages have increased.

III. The most difficult problem we are struggling with at the present time is getting women to come to our prenatal classes and to attend their prenatal clinics regularly. We have enlarged the scope of our work by starting prenatal classes for the wives of men of moderate means. We have increased our prenatal clinics from seven to nine each week. We are getting ready to hold a weekly baby conference at the hospital.

IV. Activities — Prenatal care: 5 prenatal clinics at Maxwell St. Dispensary each week; 2 prenatal clinics at Stockyards Dispensary each week; 2 prenatal clinics at Hospital Dispensary each week; 3 classes each week on the Care of the Baby. Our activities are limited to the city of Chicago.

V. Affiliations: We take care of maternity cases referred to us by all the local organizations, chief of which are United Charities, United Jewish Charities, Infant Welfare Association, Red Cross, Naval Relief Society, County Agent, etc. We refer all babies in our Out-Department and all babies of free patients in the hospital to the Infant Welfare Association. Students of the Northwestern Medical School, also those of the Medical School of the University of Illinois come to us for their practical obstetrical work.

IX. Hospital: Number of confinements 1st of July, 1918, to 30th of June, 1919, 2176; number of deaths, 4. Out-Department: Number of confinements, 1282; number of deaths, 1. Causes of deaths: One in puerperium at Dispensary; one at childbirth in the Hospital; one of puerperal sepsis at the Hospital, brought in from out of the city three weeks after infection started; one of influenza at the Hospital. Total number of infant deaths during the first month, 14 at the Out-Department. Total number of infant deaths during the first week at the Hospital, 34. It should

Digitized by Google

be understood that we get a great many abnormal cases at the Hospital. The average case comes to us about the sixth month, but we get a great many as soon as they suspect pregnancy, they come to have their diagnosis confirmed.

A copy of our circular announcing the classes referred to under III follows:

BETTER BABIES

At no time in the world's history have healthy happy babies been of more importance than at the present time, and yet our babies suffer from the ignorance of those into whose care they are given.

Mothercraft is woman's most important business in life and they usually go into it totally unprepared and perfectly ignorant of the subject.

Mothercraft is a skilled profession.

If a woman expects to earn her living in any other profession she spends quite a little time and money in acquiring some degree of efficiency in that field before attempting to fill a position. It is necessary in order to become competent to fill the position of mother to also spend some time and money in acquiring some knowledge of this most important of all professions.

The trouble has been heretofore that women did not know where they could go to acquire this knowledge.

In order to fill this long felt need, the Chicago Lying-in Hospital has started a series of classes including lectures and demonstrations to prepare women for their maternal duties. The course covers the following:

Personal Hygiene during Pregnancy.
Care after Childbirth.
Baby Hygiene — Layette.
Technique of Breast Feeding.
Technique of Artificial Feeding.
Care and Training of Children from Birth through the Period of Adolescence.

The classes are held at our Mothers' Aid Pavilion, 5038 Vincennes Ave., on Tuesday of each week at 3 P. M. The cost is $4 for the entire course, payable in advance. Arrangements for enrolling in the classes should be made at the hospital office — 426 East 51st Street, telephone "Kenwood 7820."

All expectant or young mothers are invited to attend these classes.

JESSIE F. CHRISTIE, *Superintendent*

INDIANA

THE BABIES' MILK FUND ASSOCIATION

Evansville

Organized June, 1915.

I. Medical and Nursing Staff: We employ three nurses, and have fourteen doctors on our staff. All these doctors serve at the clinics, giving advice and performing operations without charge.

II. Financial: Our total budget for the year 1919 is $6,096. Our organization is supported by annual appropriations from the county and the city, and also by funds raised in an annual public campaign. Our work, which is strictly charity, is so widely recognized, that our campaign week is fast becoming a week for the payment of annual subscriptions. The work of our association is given free of charge. Mothers whose financial condition has been improved by the advance in wages, continue to attend our clinics and ask the advice of our nurses and doctors.

III. Our most difficult problem is to see that families that can afford to pay, do not take advantage of our free milk distribution or of our free operations. This year we are extending our work into the county. This year our association was offered a baby hospital entirely equipped, of twenty beds, providing that we should assume the entire financial upkeep. A committee investigated the matter of cost by

Digitized by Google

conference with managers of various institutions of like character throughout the United States, and recommended finally that we reject the offer. The overhead expense for so small a hospital made the cost of each bid extravagant, and it was decided that we could send our patients who needed regular and systematic supervision to a city hospital.

IV. Outline of Activities: Our work is limited to the prevention of infant disease and mortality in children under six years of age. Clinics are held twice a week, where our doctors and nurses give advice and perform operations. Our nurses make visits to all sick babies on our roll, all of which visits are free of charge, though often a family makes a voluntary contribution to our funds, where they are able to pay something, though not the full amount of a doctor's or nurse's fee. We supervise and test the milk which is sold to babies by one of the city dairies, though we have no certified milk. We give milk to babies in some cases, while in others we pay part of the cost, allowing the family to pay what is possible. Mothers who are pregnant may often come to our nurses for advice and help, though we make no special provision for this work. We hold demonstrations and lectures in county schools for the mothers, and our nurses make visits anywhere in the county.

V. Affiliations: We operate our own hospital three months of the summer in tents in one of the city parks. Here we receive delicate babies, whose feeding is under our supervision. The hospital contains ten or twelve beds, and we provide a housekeeper, a day and night nurse and a nursemaid. The social service worker of the Rescue Mission investigates all our charity families, to see how much help it is advisable or necessary for us to extend. The chairman of the city board of health is one of the doctors on our staff.

VI. Results of the Children's Year: Our organization conducted the weighing and measuring, but the follow up work has not been general. Mothers who had become interested brought their children back to be weighed, and improvement was always noted. As a result of the campaign, the mothers' interest was aroused which resulted in their more intelligent care. The city schools through a state employed dietetian maintained nutritional clinics, but the attendance at our clinics was not materially increased, nor was it found necessary to increase our staff.

VII. Effect of General Advance of Wages: The standard of living has been greatly improved since our organization in 1915, but our nurses attribute this not so much to increased wages, as to prohibition and the Indiana State Housing Law, which has brought about the destruction of *all* tenements. The illness of the babies has not decreased, but the number of deaths, in our care has. There has been less sickness in children between two and six in our care. We make no attempt to work among colored children, though whenever we are called upon, we make visits and deliver free milk, etc., as we do for our white babies. We have practically no mothers of foreign birth.

VIII. Wages and the milk situation: The amount of milk we buy and give free of charge is decreasing. Whether this is due to increased wages or to closer supervision of the distribution, it is impossible to say.

IX. Statistical: A. Prenatal. All information on prenatal care can be only approximate, since we keep no records, and the mothers come voluntarily, and are never solicited; our work having been limited to babies under school age. We advised between 40 and 50 mothers, who came to our nurses in about the fourth month of pregnancy; none of these died during pregnancy, and childbirth, or during the puerperium. Total number of infant deaths, 22. We do not keep exact age of infant except in years. Of these deaths, 5 were in our care, under complete charge of our doctors and nurses — 17 were in outside care, under a paid outside doctor, but visited by our nurses.

B. Midwives: The records of city births attended by midwives are incomplete. Two out of all the babies on our rolls were attended by midwives.

C. Postnatal care: We care for children up to six years. We cared for 1,070 under one year, for year ending October 1, 1919. We cared for 1,906 between one and six years for year ending October 1, 1919. We hold two weekly clinics; each clinic

Digitized by Google

has an average attendance of 35 babies, totaling 70 babies for the week. The average baby comes under our care at two weeks, though the age varies with the weaning. Seven per cent. of the babies born this year in the city are "under our care." "Under our care" means only those babies who are under our doctors, not under our nurses only but in outside doctor's care. Six per cent. of the babies born this year in the county are under our care.

D. Total births for year ending December 31, 1918, 1,440. Total deaths under one year for the year ending Dec. 31, 1918, 104. Seventy-eight per cent of the deaths under one year in 1918 were not on our rolls. Since 1914, the time at which infant welfare work in this city was begun, the death rate in children under one year has decreased from 195 to 72.2 per thousand.

M. E. ROSENCRANZ, *Secretary*
MRS. MARY C. TRIMBLE, *Supervising Nurse*

CHILDREN'S AID ASSOCIATION

Indianapolis

The Children's Aid Association of Indianapolis was organized in 1905. It has at present, in connection with its baby clinic work, 8 stations, each in charge of a physician and a graduate nurse. There are, therefore, 8 nurses and 8 physicians. One of the physicians acts as general director and receives a salary.

Each one of the clinics is open a part of one day each week, the nurses, of course, visiting in the homes throughout the entire week. The service is rendered entirely free of charge. Milk is not dispensed through the stations, but is ordered at reduced rate for each baby registered at the stations, and in case the mother's financial condition is such that she is unable to pay for it, the Association supplies the milk free.

There is the closest cooperation with other agencies such as the relief organizations, the hospitals and the Medical School clinics of Indiana University, and with the Department of Health, which makes an annual grant in support of this infant welfare work. The relationship with the Public Health Nursing Association is very intimate, in that the same supervisor directs the work of each group of nurses.

It is our plan just so far as we are able to visit each infant born in the city as soon as possible after his birth has been reported to the City Board of Health, and to follow the child thereafter until he is 6 years of age. The clinics have emphasized particularly the work for infants under two years of age, but they have also undertaken the examination and supervision of children between 2 and 6 years of age.

The total number of infants seen in 1918 was 2,244. Of these 1,937 were under one year of age. There was a death rate of 16 per thousand among the babies registered at the milk stations and the per capita monthly cost of supervision was 38 cents. The death rate in the city for 1918 was 98.5. The rate for the first 9 months of 1919 was 77.7.

In another department the Association conducts a home finding work. The function of the Home Finding Department is to receive children, whose circumstances, being investigated, evidently demand that the assistance of the department be extended. They are placed after a careful medical examination in homes which have already been conscientiously studied. The visitor immediately becomes the child's friend and repeatedly visits the home to assure herself of his proper care. A graduate nurse regularly visits all babies under 2 years of age.

Children of all ages are sheltered under the watchful supervision of this department. In 1912 when the department was created, 51 children were placed in homes. Two years later 62 were placed. The number has steadily increased until in 1918, 259 were thus sheltered. During the first six months of the present year, 150 had already been thus placed in private homes.

Among the babies cared for the death rate has been negligible. From January 1 to October 1 of this year there have been 39 babies under two years of age in the

Digitized by Google

care of the Home Finding Department and by it boarded out. There has been one death among the number, and this one died of a congenital condition, four weeks after it had been transferred from the home to a hospital. Its condition was never anything but hopeless.

During the eight years of the Home Finding Department's history there have been but 3 deaths among all its children. These 3 were all under 2 years of age. Two of them died after transfer to a hospital. One only, in these eight years, has died in a Children's Aid home.

PAUL L. KIRBY, *General Secretary*

CHILDREN'S DISPENSARY AND HOSPITAL ASSOCIATION

South Bend

Organized 1909.

I. Medical staff: September, 1918–April, 1919, 2 nurses; April, 1919, to date, 3 nurses; doctors, volunteer service.

II. Total budget, $6,000. The Association is supported by private subscriptions through Federation for Social Service, and by membership dues. The most successful method for raising funds has been through the Federation for Social Service. The work done by the Association is free of charge. Mothers whose financial circumstances have been improved by the advance in wages are asked to come other than on clinic days.

III. The most difficult problem has been the regular clinical supervision of well babies. This Association is now getting back to pre-war program.

IV. Activities: Doing infant care and pre-school age work. Activites limited to our own city.

V. There is a Division of Child Hygiene in the State.

IX. Four infant welfare conferences each week. Thirty to forty babies in attendance each week. Average age of child brought under care of Association, 8 months; earliest case, 3 weeks.

OLIVE M. BAILEY.

KENTUCKY

BABY MILK SUPPLY FUND ASSOCIATION

Lexington

Organized May, 1914.

I. Staff: Under normal conditions we have 2 doctors, 1 nurse and 1 assistant. No charge is made for the services of the Association.

II. Financial: The Association is supported by a monthly appropriation amounting to $100 from the city, by membership dues and special contributions.

No fee is asked for care given to babies brought to clinic, but each family is encouraged to pay what they can for milk supplied to baby. In a few cases we receive full price — 10 cents a pint and 18 cents a quart.

IV. Activities: When visiting the homes prenatal and maternal care is given as far as possible, and in every case mothers are encouraged to go to a hospital for confinement, if possible. We instruct the mother in the care of her baby, and breast-feeding always encouraged.

Our activities are limited to the city.

V. Affiliations: We always co-operate with other organizations in any way we can. The hospitals are always willing to care for our sick babies. We have no division of child hygiene in the city.

VIII. Wages and the milk situation: We find many people realize the value of milk as a food for children and are willing to pay us a little more for milk furnished baby. We also notice the mother tries to buy milk for baby after it is taken off our list.

Digitized by Google

IX. Statistical: 178 babies cared for during year. 70 under 1 year. 108 between 1 and 2 years. 6 deaths.

One welfare conference is held each week, with an average of 8 in attendance.
Total number of births in 1918, 672.
Total number of deaths during first year, 27.
Number of deaths in 1917, 66.
Number of deaths in 1918, 75.
Number of births in 1917, 649.
Number of births in 1918, 672.

BABIES' MILK FUND ASSOCIATION

Louisville

I. The Babies' Milk Fund Association of Louisville was organized in the year 1908. After 10 years of splendid work as an individual organization, the Association in July of this year affiliated with the District Nurse Association and later, in September, the School Nurses came into the combined organization. These three phases of public health work are now under the direction of the one superintendent and her assistants, and the future portends for Louisville higher standards of public health and welfare, and to the nursing staff is given the opportunity for more intensive work in a broader field.

This year the staff of infant welfare nurses was increased in number to 10, 6 young laywomen volunteered their services as assistants at the baby clinics, and 10 doctors gave us their services at the clinics free of charge.

II. The budget for the Babies' Milk Fund Association for the current fiscal year is $14,000. The organization is supported by city and county appropriations, income derived from interest on endowments, yearly subscriptions solicited by the Welfare League with which this Association is affiliated, and voluntary contributions.

III. Heretofore all our services have been given without charge but we hope to install a fee system, charge per visit to be about 60 cents, by which we hope to reach mothers in moderate circumstances who do not need charity, but who are in need of advice and instruction in the care of their children. Mothers, whose financial circumstances have improved, still continue to attend the conferences and ask our advice.

IV. During the past year this Association has undertaken no new work, other than the opening of an additional clinic. Because of the fact that we have had no supervisor for nearly a year we have only been able to carry on the regular daily routine. One nurse makes prenatal visits only and has charge of the Prenatal Clinic where prospective mothers, who are not able to pay for the services of a private physician, may come to get the advice of the clinic physician gratis. The district nurses give all the postnatal care and 10 days after birth the infants are turned over to the supervision of the Infant Welfare nurses until the kindergarten age is reached, when the School Nurses take them in charge. There are nutritional clinics in connection with the city schools.

V. We co-operate with the Children's Free Hospital, with the City Hospital and follow up dismissed cases referred by the Social Service Department of the City Hospital. One private hospital sends the student nurses to us for one month of infant welfare training. We are at all times in close co-operation with the city Department of Health and the relief organizations which are affiliated with us in the Welfare League. There is no division of child hygiene in the city or State.

VI. In our city the only result in evidence which can be attributed to the examinations of infants, as conducted according to the Children's Bureau plan during April, 1918, is the increased enrollment of the Babies' Milk Fund Association and the increased interest of the public schools in the welfare of the children. In the majority of the schools there are periodic examinations of the younger children and increased supervision by the school nurses. For the first time in the history of the

Digitized by Google

public schools of Louisville the school nurses are under a supervisor and during the coming year we have hopes for the rapid development of health work in the schools.

VII. We do not find that the increase in wages has had any general effect upon the standards of living; there are still the same problems of poverty to contend with because of the advance in the cost of living.

VIII. The amount of milk bought for babies by this Association has decreased with its increase in enrollment. The list of breastfed babies enrolled is constantly increasing. However, the situation in the city shows, judging from the difficulty certified milk dealers have in filling orders, that there is an increased demand for milk as a food for children.

IX. Statistical:

A. Prenatal Care:

Total number of mothers cared for during the year, 194.
Average number of months under care, 2.25.
Total deaths of mothers, none.
Total number of infant deaths, 4:
At birth, 3.
During first month, 1.
The month of pregnancy women come under our care:
Average cases — end of sixth, beginning of seventh.
Earliest case — second month.
(The average case is somewhat late owing to the fact that we have been taking a large number of prenatal cases for the Metropolitan Life Insurance Company, and these are most frequently referred to us two or three weeks before delivery.)

B. Midwives:

We are not able to get city statistics relative to midwives and the percentage of babies on our roll whose births were attended by midwives is very low.

C. Postnatal Care:

Age limit of babies or young children under care, 5 years.
Total number under 1 year cared for, 1,147.
Total number between 1 and 5 years cared for, 1,016.
Older children are referred to the school nurses for supervision.
Total number of infant welfare conferences each week, 5 and 6.
Average number of babies in attendance each week, 87.
The earliest case in which the child's life is brought under our care is at birth.
The percentage of babies born in our city, during the fiscal year, who came under the supervision of our organization, 17.5 per cent.
The percentage of babies born within the last calendar year in our city who came under the supervision of our organization, 16 per cent.

D. Total births in Louisville for year ending December 31, 1918, 3,667.
Total deaths under 1 year for year ending December 31, 1918, 480.
Percentage of the deaths of infants not on the rolls of our Association which occurred during the last calendar year, per 1,000, 99.5 per cent.
There has been an increase in the death rate among children under 1 year.
The Health Department attributes increase of death rate to growth in population.

Recommendations:

Extensive and intensive educational campaign in homes and in public schools as a means of combating the increasing death rate.

SOPHIE C. NELSON, R. N., *Superintendent*

Digitized by Google

LOUISIANA

CHILD WELFARE ASSOCIATION

New Orleans

Organized May, 1913.

I. Staff: Under normal conditions 36 nurses, 7 doctors, all of whom are paid for their services.

II. Budget: $50,000. The Association is supported by an appropriation of $3,500 a year from the city treasury, and by membership dues, amounting to approximately $45,000.

Formal membership drives and steady work by membership committees have been found to be the most successful methods of raising funds.

A fee of $10 is charged for maternity service. All other service is given free.

III. The most difficult problems of the past year have been: (1) Slow and inadequate birth registration; (2) poorly untrained, unsupervised midwifery service; (3) practice by incompetent physicians; (4) unsafe and inadequate milk supply; (5) inadequate housing facilities and increased cost of living not paralleled by increased wages; (6) unsafe and wasteful collection and disposal of garbage. None of these problems have been solved.

Changes in procedure: The entire methods of nursing service has been revised under direction of the Children's Bureau.

IV. Activities: Five maternity centers have been established at which prenatal clinics are held once a week. The clinics are conducted by especially trained obstetricians assisted by obstetrical nurses. Mothers registered at these clinics receive careful prenatal care by doctor and nurse, are attended at delivery by physician and nurse and receive daily after care by the nurse and not less than three calls after birth from the physician. A charge of $10 per case is made for this service.

Infant care: Thirty-six infant welfare clinics per week are held under the direction of a regularly employed staff pediatricians assisted by 36 infant welfare nurses, beside nursing and the usual supervision of well children in their homes are given by these nurses, children to pre-school age which attend these clinics and are supervised by the nurses. No care is given to children of school age or to adolescent children and no nutritional clinics are conducted. The activities of the Association are limited to New Orleans.

V. Affiliations: With hospitals, medical schools, relief organizations, etc. The child welfare nurses attend three clinics at the hospitals and assign cases within our fields to proper nurses. The common case council of all social agencies interested in any case is called once a week to make a formal plan for this case and to pro-rate the necessary relief.

With City or State departments of health: From the City Board of Health we obtain daily all the names and addresses of recorded births, and monthly, names and addresses of reported deaths among children under 6 years of age. There is no division of Child Hygiene in New Orleans, but there is one in the State Board of Health.

VI. Results of the Children's Year Campaign: A greatly stimulated community interest in the health of children has made it possible for this organization to increase its staff of nurses from 6 to 36 and the number of its clinics from 5 to 40. From the Children's Bureau we have received invaluable assistance in the organization of this increased scope of work.

VII. As to the effect of the general advance in wages upon the standards of living of the families with which our organization is in touch: The answer to this and to the following five questions is based upon observation, not figures. We do not find that the increase in wages has equalled the increase in the cost of living, but the apparent money surplus for a time encouraged unwise and unsound expendi-

Digitized by Google

tures. The general advance in wages has not been sufficient to improve the health or general welfare of children, on the contrary the number of under-nourished children is apparently greater and the number of nursing mothers with inadequate milk is decidedly greater.

There has been less illness each year for the past 10 years, except for the years in which we have had epidemics.

This organization does not care for colored mothers and children, the work is done by a colored organization which has just been started.

VIII. Regarding the amount of milk bought for babies and children: For children under the care of welfare nurses, the per capita consumption of milk increases slightly every year. Records of milk dealers show that the general per capita consumption of milk for New Orleans has decreased steadily in the past 18 months.

IX. Total number of mothers cared for during the year: Maternity work of the Child Welfare Association has been in operation only since the first of October. The figures herein following are, therefore, only for the one month. We have on roll a total of 210 maternity cases to whom we are giving prenatal care; of these, 96 expect to be delivered by Child Welfare physicians, 42 by family physicians and the remainder by midwives. Of this 210, 20 per cent have enrolled during three months of gestation, 18 per cent between the third and sixth month, and the remainder between the sixth and eighth month.

The total number of infant deaths during the year 1918: Out of a total registration of 10,406 children there were 71 deaths. However, the average monthly roll of the Association for the year 1918 was 6,891 children; of these 71 deaths, 64 occurred during the first year of life, 18 during the first month of life. This figure 18 is unduly small because of the fact that the average age for enrollment for children is still well over one month.

Midwives: The approximate percentage of births in New Orleans attended by midwives, 60.1.

Per centage of babies on our enrollment whose births were attended by midwives, 80.4.

Age limit of babies or young children under our care: Under six years of age.

Total number of children under one year cared for during 1918, 2,717.

Total number of infant welfare conferences each week, 32.

Average number of babies in attendance at each conference, 15.

Average age at which children are brought under our care. It is impossible to give an estimated answer to this question while the Association continues to canvass and open new fields. Whenever a new field is opened entire families are enrolled. However, the Association secures daily from the City Board of Health names and addresses of all reported births, and children within our fields are enrolled by the nurses. Also the fields assigned each nurse is small enough to permit her to see each family from two to three times a month, and to canvass at least one block every day in order to check up removals and newcomers.

Twenty-five per cent of the babies born in New Orleans during the calendar year, come under the supervision of our organization. Percentage of the babies born within the last calendar year in districts covered by our organization who have come under the supervision of our Association, has been 92.5 per cent of those who survived the first month.

50.42 per cent of the deaths under one year that occurred during the last calendar year in the districts covered by our Association, were of children who were *not* on the rolls of our Association. Of these, virtually all were children under one month of age.

There has probably been an increase in the death rate among children under one year in New Orleans within the last year. There has been an actual increase in the number of deaths — from 870 to 957. It is impossible to estimate the death rate because of the inadequate birth registration, neither is it possible to estimate approximately the increase in the population.

MARY L. RAILEY, *Executive Secretary*

Digitized by Google

MARYLAND

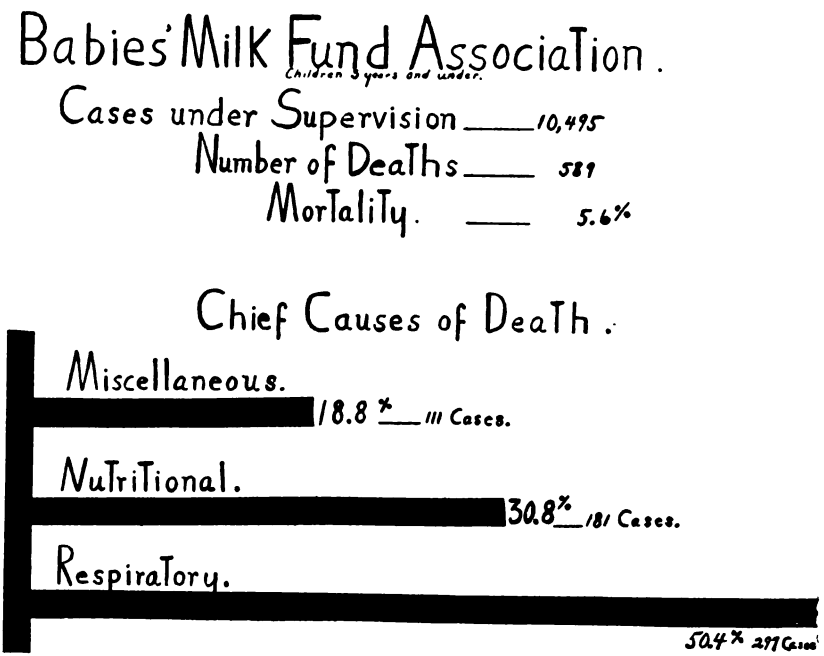
BABIES' MILK FUND ASSOCIATION, BALTIMORE

The welfare of its children is a fair index of the intelligence and public spirit of a community. An organization caring for children must be judged by the results obtained in promoting the health and reducing the death rate of its beneficiaries and should receive the hearty support of the public in proportion to its efficiency.

It was with a desire to check up the work of the Babies' Milk Fund Association in Baltimore that a brief statistical study of a year's records (1918) was made. The organization at present conducts 20 weekly welfare conferences in various sections of the city. In each of these the mothers of the neighborhood and their young children are encouraged to meet a physician and nurse for instruction and advice in order to "keep their well children well."

The 22 trained nurses of the Association devote their entire time, in addition to assisting at the clinics, in visiting the homes of children under three years of age, nursing sick infants, and in assisting the mothers in all matters pertaining to the care of their children. The visits both at the clinics and at the homes are restricted to those mothers who without this help would not be able either through ignorance or poverty to care satisfactorily for their children.

PLATE I



During the year 10,495 children under three years of age came under the supervision of the Association. (*See Plate I*). Of this number, 5,795 (55 per cent)

Digitized by Google

attended the station conferences. The racial affiliations of the children may be roughly stated as follows:

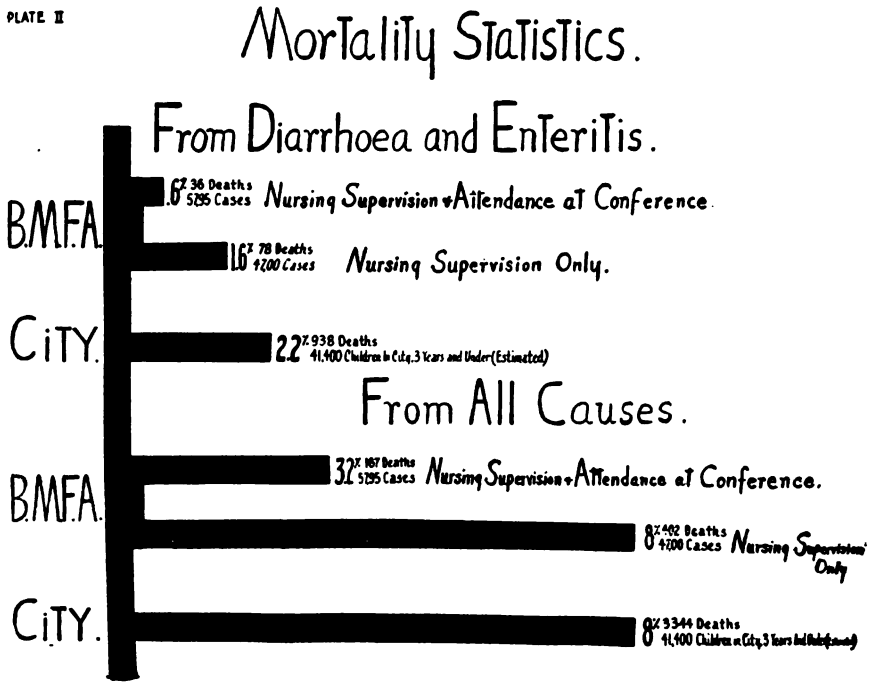
	Per cent
Children of native parentage	42
Children of foreign parentage	26
Children of negro parentage	25
Children of parentage unstated	7

This tabulation indicates that the babies coming under the care of the Association belong for the most part to the least prosperous classes of the community, among which the largest infant mortality would naturally be expected.

Of the total number 589 died, a mortality of 5.6 per cent. Of the 5,795 children who attended the clinics, 187 died, a death rate of 3.2 per cent; 52 of this number, or 27 per cent, were in serious condition when first seen at the clinics and were referred at once to hospitals. In order to obtain some idea of the assistance which the Association is rendering to the child life of the city it is necessary to compare the above mortality rates of the children receiving our aid with the death rate of children of the same age in the city at large. It must be remembered that the latter figures include the children of the well-to-do, among whom the mortality is naturally low. It is estimated that there were during the year studied, 41,400 children in the city under three years of age. Among this number there were 3,344 deaths a mortality rate of 8 per cent as compared to 5.6 per cent among the children on the records of the Association. and 3.2 per cent among children attending the welfare conferences. (*See Plate II.*)

An analysis of the fatal cases in regard to the gastro-intestinal diseases is instructive.

PLATE II



Digitized by Google

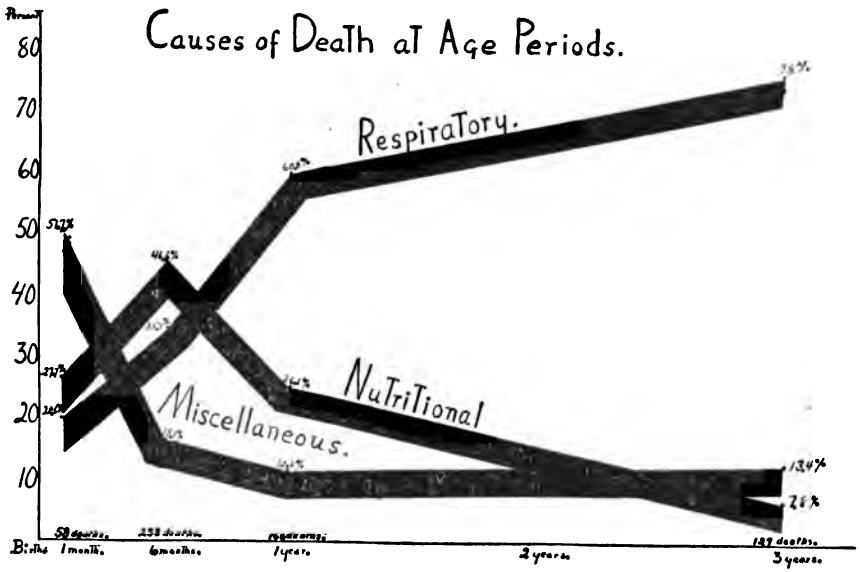
Of the total number of children up to three years of age, attending the welfare clinics (5,795), there were but 36 deaths from diarrhœa and enteritis, a mortality rate from this group of disorders of .6 per cent. as compared to 78 deaths, a mortality rate of 1.6 per cent, among 4,700 children who did not attend the clinics but who received nursing supervision in their homes and to 938 deaths, among 41,400 children of the same age in the city at large a rate of 2.2 per cent. There were but eight cases of dysentery (ulcerative ileocolitis with bloody discharges) among 10,495 children on our records *and but one of the eight had attended the welfare clinics.*

In 1918 ileocolitis was an exceedingly prevalent disease in Baltimore; the results here reported, therefore, are at once striking evidence of the efficiency of our work and of the possibility of completely eradicating dysentery as a factor in infant mortality.

Taken as a whole these figures demonstrate that with adequate medical and nursing supervision, including instruction in cleanliness, in the preparation of milk mixtures and the boiling of all the ingredients used in their preparation, the incidence of disease and death from the diarrhoeal disorders of infants including what is popularly known as summer diarrhoea, can be reduced to a minimum. This group of diseases formerly so fatal in our large cities, needs no longer continue the great menace dreaded for many years.

A consideration of the causes of death in respect to the age periods shows clearly what general conditions are most fatal at the various ages and where emphasis must be laid if the mortality among young children is to be further curtailed. (*See Plate III.*)

PLATE III



It is to be noted that more than one-half of the deaths in the first month fall in the class called miscellaneous and do not belong to nutritional or to respiratory diseases. Among the miscellaneous group are included those children born with

Digitized by Google

malformations and congenital debility; many are syphilitic, and succumb shortly after birth. Our records do not show the enormous mortality during the first weeks of life, as so many of the children first come under our observation at a later period. It has been demonstrated repeatedly that the average death rate during the first month is about one-third of the total mortality during the first year. This can be reduced by a public sentiment which will prevent the marriage of the physically unfit, by more intensive supervision and adequate care, and by better obstetrical practice.

Our nurses are making prenatal visits in cooperation with several of the obstetrical clinics of the city. The notification of pregnancy is made as a rule, late and the number of visits possible before delivery is too few. Such prenatal visits should be made at least once a week and for several months, to insure the mother against complications and the loss of her child. There should be provision also for the treatment of venereal diseases.

Of 795 negro women who were visited prenatally the pregnancies resulted in non-viable births in 10.3 per cent of the cases. In contrast, of 649 white women visited but 2.6 per cent of the pregnancies resulted in non-viable births.

To prevent the early loss of life prompt knowledge of the pregnancy and intensive prenatal and early postnatal supervision is necessary.

The largest number of deaths from nutritional disorders occur under six months of age. At this period maternal nursing is often stopped and an unsuitable artificial feeding begun. From this time throughout the remainder of the three years' period there is a continuous reduction in the mortality from nutritional disease. It is obvious from the satistics here presented that this cause of infant mortality can be largely removed if the children can be brought under the proper continuous supervision from the early months of life.

The comparatively large number of fatalities from respiratory diseases is surprising to those who have not followed infant welfare work in recent years. Of the total deaths under three years, 297, or more than half, were due to respiratory diseases. (*See Plate I.*) Particularly after six months of age there is a steady increase in the relative number of deaths from respiratory infection. Between one and three years (*see Plate III*) this group forms 78 per cent of all the fatal cases. The negro children on our records show no greater susceptibility to respiratory diseases than do the white children. It is manifestly impossible to protect young children from respiratory diseases amid the crowded housing conditions in the congested portion of the city, especially during the winter months and with the large amount of inclement weather. Any measures which insure better living conditions, less crowding and more fresh air will of course lower the high death rate from this cause; especially is it important that adults and older children with colds and coughs should be kept away from infants. Much, however, can be done at once by skillful nurses to diminish the incidence of this most serious form of illness.

It is perhaps wise to lay stress on the emergent character of all this work. It is so necessary because the conditions amid which so many young children must live are unsanitary and so many mothers are without knowledge fitting them to care for their children properly. When all the girls of the country enter married life with some knowledge of infant hygiene, much of this welfare work will be unnecessary. Just at present it is urgently needed and is meeting with gratifying success even amid unfavorable conditions. Each year in Baltimore at least eighteen hundred deaths among infants and young children could be prevented if all the children not adequately cared for could receive such medical and nursing supervision as is provided through attendance at the welfare clinics and the home visits of our nurses; that is to say instead of having a mortality of 8 per cent under three years, representing 3,344 deaths, it could be reduced to a death rate of 3.2 per cent, representing less than 1,500 deaths. It should be emphasized moreover that children who survive their third year for the most part are not diseased and handicapped but have an average life expectancy.

Digitized by Google

The yearly loss therefore to a community from this easily preventable death rate is impossible to calculate. Should not the work of an organization capable of effecting such a salvage of child life in the community receive the interest and support of every citizen?

J. H. Mason Knox, Jr., M.D., President
Grover F. Powers, M.D., Director

MASSACHUSETTS

BABY HYGIENE ASSOCIATION

Boston

Organized, 1909.

I. Staff: 29 nurses, 23 doctors. Since April all have been paid $3 a conference, whereas before all were volunteer workers.

II. Total budget for the year was $44,608.98. The organization is supported by special contributions. The methods we have found most successful in raising funds are annual reports and special appeals. The work done is given free of charge. We find that the mothers, whose financial circumstances have been improved by the advance in wages, still continue to attend the conferences and ask our advice.

III. The most difficult problem: To keep pace with the growth of the work. An increase in the staff has only partially taken care of the increase in the number of babies. We have enlarged the scope of our work. We take care of all babies up to two years and in five stations we take care of children up to six years.

IV. Activities: Infant care — 20 infant welfare stations. Pre-school age — 5 child welfare stations. A doctor in charge of conference, and a dietitian the home visitor.

V. Affiliations: Settlement houses give us room for stations and help in the support of the child welfare work. Other organizations help with workers. Three conference physicians come from hospitals. Some teaching in pediatrics done at conferences. Staff nurses attend meetings of local relief organizations and work with them. City gives us room for stations.

VI. Result of Children's Year Campaign: Opened fifth child welfare station as result of weighing and measuring campaign. Welfare stations increased from 16 to 20 in the last year. Increase in number of babies cared for and increase in conference attendance.

VII. Effect of general advance of wages upon standard of living: Cost of living seems to have increased at least as much as wages. Conditions do not seem better except in families where there are several wage earners.

VIII. Wages and Milk Situation: Amount of milk bought at milk stations has increased. Milk campaign has helped.

IX. Prenatal care: The Baby Hygiene Association does not do prenatal work except by referring all pregnant women to hospitals or private physicians.

Digitized by Google

Postnatal Care:

Age limit of babies or young children under our care, 2 years in 15 stations, 6 years in 5 stations.

Total number under two years cared for, January–September, 8,654.

Total number between 2 and 6 years cared for, January–September, 548; week of September 30, 1919, under 1 year, 3,205; 1 to 2 years, 2,546; 2 to 6 years, 479.

Twenty-seven infant conferences each week. Average number of babies in attendance each week, 47.7.

Average age at which child is brought under our care is under one month, 12 per cent, 1 to 2 months, 32 per cent. 33⅓ per cent of the babies born in Boston during the calendar year came under the supervision of our organization.

Forty-three per cent of the babies born within the last calendar year, in the districts covered by our organization, have come under the supervision of our association. Total births for year ending December 31, 1918, 20,063. Total deaths under 1 year in our city for same period, 2,298. Death rate under one year for 1917, 98.96. Death rate under one year for 1918, 114.54.

WINIFRED RAND, R. N., *Supervisor.*

MASSACHUSETTS SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN

Boston

Our work has not changed in any essentials since last year or the year before, but here is an illustration as to how the society is able to work in behalf of the infants.

A child about twenty-two months old was brought to our attention late in August of this year by a district nurse. It was clear that the mother was entirely unwilling to carry out the orders of the nurse and the child's life was despaired of unless some immediate provision was made. The doctor had advised that the baby must be taken on the Floating Hospital to save its life, but neither doctor nor nurse had been able to persuade the mother to go to the Floating Hospital and the child was growing steadily worse. After satisfying ourselves of the correctness of this analysis, our purpose was stated as one of forcing treatment by court order if necessary, and when the mother was unwilling to fall in with the doctor's plans upon our urging, we asked the judge of the Juvenile Court to grant us a warrant to bring the matter immediately before him. This was done within three hours, the child was placed in the care and custody of the Society, with our agent who handles these cases, who is a trained nurse, as surety. A short continuance was granted and it was explained to the mother that she must give such care as the doctor required, otherwise the child would be permanently taken from her. It has been watched along from day to day by nurse and agent. Conditions have improved, the child is doing better, almost doing well, and we believe that we have in this way saved the child's life.

This, of course, is not a mere exception, but it is a plan by which we are able often to put a spoke into the wheel just at the right time.

C. C. CARSTENS, *General Secretary*

STATE DEPARTMENT OF HEALTH

Boston

Child Hygiene Activities

The child hygiene activities of this Department are chiefly centered in the Division of Hygiene. Actively engaged in this work are a director, five nurses, forming a Subdivision of Public Health Nursing; a Health Instructor on Foods who handles the problems of food and its relationship to health; and a Supervisor of

Digitized by Google

Mouth Hygiene, who handles oral hygiene problems; also a Health Instructor in charge of exhibits.

The function of the State Department of Health is to stimulate activity in the different communities of the State. For that reason we do not try to carry a very large force of workers or to do much in the way of investigation of individual cases.

Our plan of procedure does not consist of individual case work but rather comprises investigations of child welfare activities throughout the State, consultations with local health authorities and private agencies for the purpose of aiding them in establishing new work or extending work already undertaken; educational work intended to stimulate the general public to a realizing sense of the need of child welfare activity. The educational work is carried on by means of exhibits, moving pictures, stereopticon slides and lectures by both physicians and nurses. The Department staff of eight District Health Officers, with eight Nursing Assistants, are also directly concerned in this child welfare program, as well as in other phases of public health work.

The establishment of a Subdivision of Public Health Nursing within the Division of Hygiene is one of our recent developments and that subdivision has charge of all the nursing activities of our own child hygiene nurses and also, so far as the State has any supervision whatsoever, of similar work throughout the State. It should be said, however, that this supervision is only a voluntary affair. We do not have legal authority for it.

We have undertaken various investigations through the agency of public health nurses. Our nurses are also available for advice to the nursing forces of the different cities and towns. We are glad to help establish new work and to show them how to do the work but not to carry it on ourselves. This year an additional step has been taken in co-operation with the Red Cross. The New England division has furnished us with a Field Supervisor to work in our office under our chief nurse, and this Field Supervisor will have charge of the new nursing work established throuhout the State by the Red Cross chapters. In this way the State Health Department will, in effect, have supervision over all the new work of that sort started.

A second very important thing which we have undertaken has been nutritional work. We have a whole time nutritional worker in the Division of Hygiene, who began by getting up lectures, talks and exhibits. Now we are trying to do a larger piece of work and to co-ordinate all the nutritional work of the State. To do that we are making an investigation to find out how many nutritional clinics there are and who is running them, and then we are going to try to get some sort of a system whereby the work done by agricultural colleges, home demonstration agents, etc., will fit in with that done by the nurses or other agencies.

Another new feature this year has been the establishment of a section on mouth hygiene in the Division of Hygiene. We now have a Supervisor of Mouth Hygiene who tries to do the same sort of co-ordinating work for dental clinics as that mentioned above for nutritional clinics. (We have prepared a standardized dental syllabus which is taking pretty well with the dentists of the State.) We also have a health instructor for mouth hygiene whose job it is to stimulate interest in the care of the mouth and to help communities in getting mouth hygiene work started. We do not carry on field work ourselves.

During the summer we tried the scheme of having a diagnostic clinic at the agricultural fairs. We had a physician in charge and had our own tent. We hope that this may be made a permanent feature of our work. We wish to emphasize, however, the fact that we do not offer any treatment at our diagnostic clinics.

Our educational work has gone on this year much as we have always carried it out. One new feature has been getting up a child welfare outline in conjunction with the State Board of Education, for use in vocational and other schools. This is intended for the use of teachers but not of pupils. At a meeting in the State House all of the nurses who were going to do this teaching were gathered together and received some instruction on the best way to do it. We had also, in conjunction

Digitized by Google

with the State Board of Education, a sort of summer clinic at one of the State Normal Schools for those who are to teach hygiene and home nursing. Furthermore, we are trying the plan this year of offering a series of lectures on the importance of public health nursing, to the Massachusetts Training School for Nurses. This will mean undertaking to give about 250 lectures. This is simply designed to give the nurses who are going out into private practice some idea as to what public health nursing means and not to make them public health nurses.

There are two other features of our new work which should be included in this summary of our activities: One is the use of postnatal letters which are being sent once a month until the baby is a year old. These go to all mothers who have been in receipt of our prenatal letters and to any others who may wish to take advantage of this service. The second feature is the inauguration of health columns in the newspapers. We now conduct such columns in newspapers in seven cities in the State. In this way we hope that we are getting to the public during the year a considerable amount of information on the prevention of disease.

Our affiliations are with any agency, public or private, within the State, which is doing any form of child conservation work.

MERRILL E. CHAMPION, M. D., *Director, Division of Hygiene*

THE VISITING NURSE ASSOCIATION

Great Barrington

Organized in 1908 and incorporated in 1918.

Southern Berkshire with its population of 9,359, which includes the towns of Great Barrington, Sheffield, Egremont and Alford, has kept us busy during 1919. The aftermath of the influenza epidemic with its great lessons of unpreparedness along health lines; the impossibility of the community to get adequate help either in its nursing or its housekeeping; the need of trained workers and the lack of responsibility on the part of the volunteer — all these things were brought out forcibly to us.

February 11th, the National Modern Health Crusade was started in all the schools in our district except the high schools — twenty-two schoolhouses and forty-nine rooms, two thousand children were enrolled for the crusade. This was our first entry into the rural schools and as transportation was difficult, it required a great deal of time to get around. The eight health chores the child agreed to do each day for fifteen weeks to form a habit are such simple things as brushing his teeth, washing his hands before each meal, drinking a certain number of glasses of water, being in bed a required number of hours, and keeping his windows open in his bedroom. He is given credits on his score card for every chore he performs, and there are honors in titles and pins, which act as incentives in the teaching of simple good health and hygiene.

Since September, our school work has increased, as we were asked to visit all the town schools once a week and all the rural schools once in two weeks. Medical inspection has been completed this fall. In our schools we have noticed the large number of children with poor teeth who have never seen a dentist and never had a tooth brush. In order to remedy part of this defect, we have purchased tooth brushes and sell them at cost to the rural school child.

At our request, Fairview Hospital started an eye, ear, nose and throat clinic with a specialist in charge. These clinics were started in November and are to be held once a month at the hospital. The clinic is held for people who cannot afford to pay the regular rates and no private patient of any physician will be taken, unless the physician so requests. As we know, it is the rural child that has been neglected, and many of them are ill-nourished and underweight owing to tonsils and adenoids that no one has any time or money to attend to. Many of them never had a physician and have been to the nearest town once in their lives.

Digitized by Google

An interesting four days were spent September 23d to 26th at the Fair grounds. The Visiting Nurse, with the help of the Thursday Morning Club, conducted a mothers' and babies' rest tent on the grounds. Over five hundred people, mothers and babies, used the tent. Health literature was distributed freely, as well as advice to the mothers.

The State Department of Health conducted a Health Exhibit next to the Rest Tent and many of our mothers visited there. We considered our four days strenuous, but worth while, because we reached people that never come to town except once a year at fair time.

Our maternity work has doubled this last year. We attend delivery if the physician or patient requests it, and if the physician calls us. One nurse usually attends to this work, and we find the patients and the physicians glad to call on us.

The Association has now provided us with two Ford cars, and they are always in use.

Staff: Three nurses, no doctors.

Total budget, $4,000. Supported by private donations, and by a yearly drive. No appropriations from the town or state.

Activities: Prenatal and maternal care; infant care; pre-school age; school age; beside nursing; tuberculosis nursing.

Affiliations: With National Organization for Public Health Nursing, National Tuberculosis Association, American Red Cross.

W. C. SEARS, R. N., *Supervisor*

CHILD WELFARE COMMISSION

(Formerly Infant Hygiene Association)

Holyoke

Organized 1911.

I. Staff: 1 graduate nurse, 3 doctors.

II. The organization is entirely supported by an appropriation from the city. A charge is made for modified milk only, which is sold at cost.

III. The most difficult problem: The high cost of living has increased the number of cases requiring relief. The scope of the work has been enlarged by the establishment of Nutrition Clinics.

IV. Activities: Prenatal and maternal care, regular visits to the home; infant care, the chief activity; activities limited to our own city.

V. Affiliations: Prenatal and infant cases located through the aid of the Visiting Nurse Association and Associated Charities. We have the use of a bed in the maternity ward of one of the hospitals for our prenatal cases. There are Divisions of Child Hygiene in the city and State.

VIII. Wages and the milk situation: In spite of the higher cost, our mothers are using more milk as a food for their children.

IX. Prenatal Care:

Total number of mothers cared for during the year, 31.
Average number of months under care, 3 months.
Total deaths of mothers, none.
Total number of infant deaths, 15.
During the first month, 3.
During the first year of life, 10 — 2 premature.
During the first six months of pregnancy the average cases of women come under our care.
The earliest case, 3 months.

Digitized by Google

Postnatal care:

Age limit of babies or young children under our care, 5 years.
Total number under 1 year cared for, 474.
Total number between 1 and 5 years cared for, 86.
Weekly infant welfare clinics are held.
Average number of babies in attendance each week, 35.
Average age at which the child is brought under our care, second month; earliest case, 24 hours.
Approximately one-third of all babies born in Holyoke come under the supervision of the Child Welfare Commission.
Total births for year ending December 31, 1918, approximately 1,700.
Total deaths under 1 year for same period, 215.
Ninety-three per cent of the deaths under 1 year during the last calendar year were not on the roll of the Child Welfare Commission.
Fifteen per cent increase in the death rate among children under 1 year during the last year.
Total deaths under 1 year, 171.
Death rate, 100 per 1,000 — a decrease of 26 per cent over 1918.

LUELLA THOMPSON, R. N., *Nurse in Charge*

VISITING NURSE ASSOCIATION

Springfield

I. The Visiting Nurse Association of Springfield was organized in 1915. From 1 nurse in 1915 the staff grew to 5 in 1917, and at present (1919) the staff consists of the Director, Executive Secretary, Registrar, 11 visiting nurses, and 5 associate nurses. Three of the associate nurses are employed and financed by factories, and 2 by a neighboring town. They are connected in an advisory capacity with the Visiting Nurse Association.

II. Our budget for the current year is $24,000. It is raised through an annual Community Chest drive. This Community Chest raises the budgets of 19 organizations. We have a list of factories which are "Commercial Members" of our Association and pay an annual fee based on the number of employees they have. We have one endowed nurse, and we receive about $4,000 a year in fees.

We ask no fee for prenatal or well baby visits, but a fee of $3 for care during labor, and a fee of 50 cents a visit is asked for all calls other than the above. We find that mothers attend our conferences with no regard to financial circumstances.

III. We have changed our method of procedure in the past six months from generalization to specialization in several instances. We have detailed two nurses to well-baby work entirely, and two more to prenatal work and care during labor entirely. The remaining seven generalize doing perhaps half well-baby work.

IV. We make fortnightly visits to prenatal patients. We give care during labor. We get a weekly list of births from the Board of Health and visit these babies with a view to maternal feeding, Baby Conferences, and also following up further those mothers who need supervision. We keep babies under our supervision until two years old. Very little is done for children between two and six. We have attempted it, but find it a need yet to be filled, for our staff is not large enough to cope with the added effort it would mean to do systematic work for children of pre-school age. We are not doing school nursing nor are we holding any nutritional clinics.

V. While we co-operate very closely with all other agencies in the community and in the state, we have actually taken over the work of but one association. Two years ago the Baby Feeding Association, then supporting a milk station and two nurses, merged with the Visiting Nurse Association, which explains the Visiting Nurse Association now doing the "well-baby" work in Springfield. The city has no

Digitized by Google

Division of Child Hygiene but the State of Massachusetts is doing much along this line.

VI. This organization did a large part in the Children's Year Campaign and conducted the follow-up clinics, one held two months after the weighing and measuring tests, and one held one year after. Many cases were cleared up as regards throat, eye, and ear defects, as well as orthopedic cases. The improvement of children is general. Physicians show more interest, parents display better understanding, and make a greater effort to prevent defects. Our Well Baby Conferences have increased from two weekly ones to five weekly conferences, and we have established three branch stations where three of these conferences are held. This likewise increases our total attendance of babies, and our staff of physicians, which now numbers five. There is a rotating staff of physicians, each giving two to four months at a time.

VIII. Since our increased work among babies, less milk has been bought, for there is more breast feeding. Older children have been given an increased amount during the past six months. Due to the high cost of milk, the children had not been getting enough until a campaign was carried on to educate parents to the food value of milk for young children.

IX. Total number of mothers cared for during the year, 238.
Average number of months under care, 3.
Deaths of mothers during pregnancy, 2, due to influenza, and 1 due to goiter. There were none at child-birth or during the puerperium.
Deaths of infants at birth, none.
Deaths of infants during first month, 5.
Deaths of infants during first year, 10
Month of prenancy that women come under our care:
Average, 6th month.
Earliest, 3d month.
Approximate per cent of births in the city attended by midwives, one-tenth.
Age limit of babies under our care, 2 years.
Approximate total number under 1 year cared for, 700.
Approximate total number under 5 years cared for, 817 (all under 2).
Approximate total number Infant Welfare Conferences, 5.
Average number babies attended each week, 120.
Average age of children that come under our care, 1 month.
Earliest cases at birth.

Until five months ago we had on our list 10 per cent of the babies born in this city immediately after birth, and 10 per cent more under one year old. Since establishing a maternity service, and getting the list, we are supervising at present a much larger percentage — approximately 3/10%. The same percentage exists regarding the neighboring town which this organization supervises.

(D) Total births in Springfield in 1918, 4,070.
Total deaths under one year in 1918, 407.
Per cent of deaths of children under one year in 1918 that were not on our rolls, 12½%.

There has been no increased death rate among children under one year in Springfield in the past year.

X. Our next needs are (a) supervision of the child from two to six; (b) The licensing and supervision of midwives by the State.

FLORENCE M. CALDWELL, *Director*

Digitized by Google

MICHIGAN

THE BABIES MILK FUND

Detroit

The Babies Milk Fund of Detroit has for its object the prevention of infant mortality and the promotion of infant welfare. Established in 1906, this organization was operating independently until 1916, at which time it became an auxiliary of the Visiting Nurse Association of Detroit.

During the nine months ending June 30, 1919, three clinics were conducted — two in Detroit and one in the village of Hamtramck. On July 1, 1919, the two stations in Detroit were taken over by the Department of Health, leaving only the Hamtramck station under the supervision of The Babies Milk Fund. A total of 390 conferences were held during the year.

In July, 1919, a survey was made of the Village of River Rouge with the result that a clinic was established.

I. Until July 1, 1919, there were four clinicians, six field nurses and one supervising nurse. Since the Department of Health has assumed the responsibility of all the baby clinics in Detroit, only two clinicians have been necessary. Dr. T. B. Cooley, Medical Director, returned from overseas to resume his work with the Babies Milk Fund July 1, 1919.

During the year from October 1, 1918, to October 1, 1919, 21,378 visits were made upon 2,192 babies. Of these 1,723 were nursing calls; 355 were formula instruction calls, and the balance were instructive and supervising calls. 2,957 visits were made upon 1,234 children of pre-school and school age.

II. Budget: Included in Visiting Nurse Association budget. The organization is supported by the Detroit Community Union.

The most successful method in raising funds has been through the Detroit Community Union.

The work done by the organization is free of charge.

The mothers whose financial circumstances have been improved by the advance in wages continue to attend the conferences.

III. The most difficult problem has been inadequate housing. We have one clinic in the village of Hamtramck and one in River Rouge, July 1, 1919, two clinics which we conducted in Detroit were taken over by the Department of Health.

IV. Activities: Prenatal and maternal care work has been referred to the Visiting Nurse Association.

Where there is no school nurse, we do school age and adolescence work.

Our most difficult rural problem has been the insufficient supply of ice in the rural districts.

V. Affiliations: An auxiliary of the Visiting Nurse Association and co-operate with all relief agencies in Detroit.

There is a division of Child Hygiene in Detroit.

VI. Children's Year Campaign: Have done follow-up work in the districts in which we conducted the campaign.

Results noted: Slight improvement in health, and on the whole a slight increase in the weight of the children.

Good co-operation on the part of mothers.

The Department of Health has increased their work, and our organization has increased by one clinic.

VII. Effect of the general advance in wages upon the standards of living; the increased cost of living has cancelled increase in wages, and the quality of food purchased is not as good as formerly.

Digitized by Google

There has been less illness among the babies and among the older children of the families in easier financial circumstances.

There has been an improvement in the care given by the Jewish mothers.

VIII. The amount of milk bought for babies has not changed, but for the older children the supply has decreased.

IX. Prenatal care: Total number of mothers cared for during the year, 644.

Average number of months under our care, 3 months.

The average month of pregnancy during which the women come under our care is the sixth month; the earliest case, six weeks.

Postnatal care: Total number under 1 year cared for, 2,192.

Total number between 1 and 5 years cared for, 1,046.

Total number of children, 5 to 14 years, since January 1, 1919, 188.

Approximately seven infant welfare conferences each week.

Average number of babies in attendance each week, 41.

Average age at which the babies are brought under our care is the first two or three months; earliest about twelve days.

In Hamtramck 35 per cent of the babies born within the last calendar year have come under the supervision of our Association.

Total births in Detroit for the year ending December 31, 1918, 27,026; in the village of Hamtramck, 2,186.

Total deaths under 1 year in Detroit for the same period, 2,719; in the village of Hamtramck, 239.

In the village of Hamtramck 84% of the deaths under 1 year were not on the rolls of our Association.

ANN D. RUSSELL, *Secretary*

CLINIC FOR INFANT FEEDING

Grand Rapids

Organized 1911.

I. Medical Staff: Superintendent and 13 nurses; 25 doctors.

II. Budget, $15,800.29.

III. Our most difficult problem has been to reach more prenatal patients. Infant mortality rate is highest the first three weeks of life.
Also to prevent malnutrition of children under five years of age.

IV. Activities:

Supervision of Little Mothers' League work.

Agent for Babies' Welfare Guild in the collection and distribution of breast milk.

One Prenatal Clinic held weekly. Object, to teach mothers to care for themselves that their babies may be strong and healthy.

Two Infant Welfare Clinics held weekly at each station for children up to two years of age. Object, to keep them well.

One Pre-school Clinic weekly. Object, to prepare the child to enter school without correctible physical defects. For children from two to five years.

One Nutrition Clinic held weekly. Object, to overcome effects of malnutrition and to bring child up to correct weight for height. For children from two to five years of age.

Developments during 1919 have been the financing of the Little Mothers' League work by the Board of Education, taught by clinic nurse.
Pre-school Clinic.
Nutrition Clinic.

Digitized by Google

V. Affiliations. Federation of Social Agencies of Grand Rapids; also in close cooperation with the City Health Department.

"When the infant mortality is low, intelligence is high, and the general death rate is also low, because the intelligence which saves baby lives will operate powerfully to reduce all forms of sickness."

The working together of the Health Department, the Board of Education and the Clinic for Infant Feeding makes it possible to unify and standardize the infant welfare work of the city and to share the honors, as well as the responsibility, of lowering the infant mortality rate.

General death rate, City of Grand Rapids for 1919, 11 per cent.

Prenatal Report

IX. *a.*

Number of patients registered since November, 1915	757
Number of patients registered at clinic this year	211
Clinic patients	135
Non-clinic patients	76
Number of babies born	136
All but eleven of these babies were breast fed for at least three months.	
Number of maternal deaths — None since organization of clinic.	
Number of infant deaths	2
Stillbirths	3
Total attendance of patients	404
Visits made by two nurses	2524

Comparative Report

IX. *b.*

Infant Mortality rate, 1910, before clinic was started			10.6
	1917	1918	1919
Living births	3040	3094	2918
Deaths under one year	254	219	233
Rate per hundred	*8.35	7.0	†7.9
Death rate of clinic babies under one year	½%	½%	2/5%
Clinic death rate of clinic children	1.2%	9/10%	8/10%
Home visits made by nurses	14280	15308	12956
Home visits made by clinic attendant			2338
Telephone calls	2632	3778	2630

MARY MARGARET ROCHE, R. N., *Superintendent*

Correction: Through a typographical error, in Volume 9 of the Transactions of this Association, the infant death rate of the Clinic for 1917 was given as 5 per cent. *It should have been one-half of one per cent.* This correction should be made in the next to the last line of the report of the Clinic for Infant Feeding on page 297, Transactions, Ninth Annual Meeting of the American Association for Study and Prevention of Infant Mortality, Chicago, 1918.

* Measles epidemic.

† Influenza epidemic.

Digitized by Google

MINNESOTA

DULUTH CONSISTORY, SCOTTISH RITE MASONS

Infant Welfare Department

The Infant Welfare Department of the Duluth Consistory, Scottish Rite Masons, was organized in the spring of 1911, with an acting physician in charge during the clinical season, together with an all-year-round nurse who co-operated with the local physicians and all the allied organizations towards the furthering of Infant Welfare Work.

I. The Department has an organized staff of four physicians, two of whom serve regularly at our newly organized year-round clinics. None of our physicians receive any gratuity. Two nurses are now employed for year-round work.

II. Our Department is financed by the Scottish Rite Masons. The work done by our Association is given free of charge.

The mothers whose financial circumstances have been improved by the increased wage rate, continue to attend our conferences for advice.

III. This has been a year of an usually varied scope of activities, in that our duties and responsibilities to the community have been numerous. In the first place, the Government weighing and measuring test added not only to our clinical work, inasmuch as those tests were in some respects different from our regular practice, but also to the amount of statistical and descriptive work. Secondly, more than six weeks was consumed in attending to the extraordinary demand for nursing during the influenza epidemic. To make matters worse, it will be recalled that our city was visited by the unfortunate fire of October 12th, thereby adding not only to the number of destitute and suffering familes, but also aggravating the influenza situation. These conditions combined with our regular duties and our departmental changes were our most difficult problems for the year.

As a result of the after war conditions we have found it necessary to make an almost radical departure from the scope of our regular work. Our new plan of clinic work making it a year-round establishment has necessitated a complete recasting of our filing system calling for much more extensive history records and enrollment cards.

Our infant welfare work is limited to our city.

V. We co-operate with the County Child Welfare Board, the Health Department of the City and State, and all local charitable organizations. We report annually to the Bureau of Child Conservation of this State and to the Children's Bureau of the Federal Government. We have a Division of Child Hygiene in Duluth.

VI. We have conducted examinations of babies and children according to the Children's Bureau Plan, and have done as much follow-up work as possible. The general health of children under observation has improved as is shown by increased weights and general appearances. Increased intelligence on the part of many mothers is evident in that medical and surgical treatment suggested have been given prompt attention.

The increase in community interest in Child Welfare has been shown by the greater number of welfare conferences and increased medical and nursing staff.

VII. Due to high living expenses, the increase of the wage rate of the people with whom we come in contact has not caused any marked differences in the standard of living. However, the general health and welfare of mothers and children appears to have been benefited. Aside from the influenza and subsequent effects, we feel that there has been less illness among babies and older children during the year.

Digitized by Google

VIII. The milk inspection of the city was so carefully supervised that we thought it unnecessary to resume our milk stations this spring. However, we keep a listing of the best dairies on file for reference

IX. The City Health Department supervises the prenatal and obstetrical work while we supervise the Infant Welfare Work.

a. Total number of infant deaths at birth, 110.
Total number of infant deaths during first month, 113.
Total number of infant deaths during first year of infant life, 317.
b. Approximately 10 per cent of births in our city are attended by midwives.
c. The age limit of babies for whom we care is three years.

In connection with our Infant Welfare Work, a first examination is given all young children who attend, and if requiring attention, reference is made to the physicians and specialists.

Total number of babies under 1 year of age cared for, 577.

Total number of babies 1 to 5 years of age cared for, 639.

Our clinics were resumed April 8, 1919, at which time two stations were opened. During the summer two similar stations have been established. Average number of babies in attendance each week, 16.

Often an infant is visited in its home during the first day of its life, but the average case comes to us after the physician discharges the case.

Approximately 23 per cent of the babies born during the last year came under supervision.

d. Total births for year ending December 31, 1918, 2,518.
Total deaths for year ending December 31, 1918, 317.
(This total includes 110 still-born.)

Approximately 96½ per cent of the deaths under one year that have occurred in the city (including territories not covered by our organization) were not on the rolls of our Association.

The Health Department's yearly statistics show no increase in the death rate of children under one year of age.

ESTELLA M. GOERING, R. N., *Nurse in Charge.*

MINNESOTA PUBLIC HEALTH ASSOCIATION

St. Paul

Organized as Anti-Tuberculosis Association in 1908.
Organized under present name in 1914.

I. Staff: We have 20 physicians available for our children's clinic, who are supplied by the Northwestern Pediatric Society at our request. We have two nurses; local ones in the county also assist at the clinics. Physicians receive $25 for each clinic and expenses.

II. Total budget for the current year.....	$169,000.00	
Children's Clinics	2,400.00	Three months; total for year $31,200.
Nutrition Clinics	1,600.00	
Dental Clinics	1,600.00	
Maternal Welfare Clinics	1,200.00	
Tuberculosis Clinics	500.00	
Psychiatric Clinics	500.00	

We are financed entirely through the Red Cross Christmas Seal sale. There is no charge whatever for the patients, etc., that attend clinics.

III. Our most difficult problem has been to get the Children's Clinics and Maternal Welfare Clinics, etc., organized and put under charge of our County Public Health Association. This is now accomplished.

Digitized by Google

IV. Activities: Prenatal and maternal care, infant care, care of children of pre-school age, of school age and adolescence are being arranged for in our counties at present. Arrangements for nutritional clinic arrangements are about complete. We have 82 of our 86 counties organized with local County Public Health Associations and work through these County Associations which determine where and when the clinics are to be held. The most difficult rural problem is to get the people to act promptly.

V. Affiliations: By recent arrangement with the local branch of the American Red Cross that organization finances county nurses. We carry on an educational campaign, give demonstrations and keep in touch with legislation. Our clinics have been organized as follows:

Children's Clinic in co-operation with the Northwestern Pediatric Society; Dental Clinics in co-operation with the Oral Hygiene Committee of the State Dental Society; Tuberculosis Clinics in co-operation with the Advisory Commission on Tuberculosis; Psychiatric Clinics in co-operation with the State Board of Control; Nutritional Clinics in co-operation with the Pediatric Department of the Medical College of the University of Minnesota; Maternal Clinics in co-operation with the Obstetrical Department of the University of Minnesota.

We do no work in the large cities, except through our local organizations; very active work is done in St. Paul, Minneapolis and Duluth, but not directly by the State Association. The State Board of Health has no division of Child Hygiene except on paper; the Legislature refused to supply funds for this purpose.

We have just changed from the active work of placing county nurses to the conducting of clinics, and we are not in a position to summarize results as yet. Up to last June, the State Board of Health was conducting children clinics, but this work was being done on funds, which in the opinion of the Legislature had been diverted from the other objects for which the money had been directly appropriated. When, as a result of this legislative act, this work ceased we took over this form of clinics and other forms have since developed.

H. W. Hill, M. D., D. P. H., *Executive Secretary.*

MISSOURI

THE MUNICIPAL VISITING NURSES

St. Louis

Organized September, 1915.

I. Staff: Nurses, 20; doctors, 3 for tuberculosis, 8 for child welfare. All physicians are paid for services. Two of the 8 gave their services for a few months.

II. Budget: 26,000, city appropriation; $8,000 from private individuals. All work given free of charge.

The mother regards our centers as "schools for mothers." We have no difficulty in getting them to attend. Some of the physicians feel that work should be restricted to poorer mothers.

III. Problems: Not enough physicians to develop the pre-school work; great need for more nurse field supervisors.

IV. Activities: We have added prenatal and pre-school work to our program of child welfare. Two prenatal clinics and more will be developed as quickly as possible. Ten child welfare clinics. Pre-school clinics are being developed as quickly as possible.

V. Affiliations: The Municipal Nurses are under the Hospital Division of the Health Department. We work with all of the relief and reconstruction organiza-

Digitized by Google

tions; with clinics and hospitals utilizing same for our patients when necessary. No division of Child Hygiene in City or State.

VII. Have seen no advance of wages that can compare with advance of prices. More poverty or as much as ever before.

IX. Total number of infant deaths under 1 year, 1,382.
About one-third of all births in St. Louis attended by midwives, over 5,000 in 1918. The births of 25 per cent of the babies under our care were attended by midwives.
Age limit of children under our care, 4 years.
Total cared for under 1 year, 1,680; between 1 and 5 years, 1,246.
Total number infant welfare conferences each week, 16; 50 average weekly attendance.
Average age when brought under our care, 1 month; earliest, 2 weeks.
During fiscal year about 26 per cent of the babies born in St. Louis have come under the supervision of our Association.
Number births registered, 14,630.
Number deaths under 1 year, 1,382.
Infant mortality rate 1918, 94.4.

X. Recommendations: That there be a Director of Child Hygiene under the Municipal Health Department.

NEW JERSEY

HEALTH BUREAU

Division of Child Hygiene

Jersey City

Organized June, 1913.

I. Staff: Chief of Division and 8 physicians. All are under civil service designation and all are paid a salary.

II. Budget for year 1919, $60,847.50, appropriated by the city. Services are rendered free to every mother and baby, irrespective of their financial or social condition.

III. Two difficult problems engaged our attention during the past year: 1. Nursing mothers, chiefly foreign-born, who insisted upon placing their infants in day nurseries so as to enter industry for gain. 2. Securing competent public health nurses.

IV. Activities: During this year five stations have been opened in addition to the three infant welfare already in operation. The ninth station is now being equipped. Activities are constructive and reconstructive. The scope of our activities extends from the prenatal period to the school age. Dietetic instruction and home demonstration of selecting and preparing food for child from weaning period to sixth year are given each week. Prenatal clinics and maternity service maintained in City Hospital.

IX. Prenatal cases, 282.
Babies under 1 month, 1,062.
Babies under 1 year, 14,075.
Babies under 2 years, 3,821.
Children pre-school age, 1,456.

Mother's Institute established — a school for the instruction of mothers and midwives. A special ward is to be maintained where difficult cases coming to the attention of the welfare station may be referred. A special appropriation of $25,000 is being used to remodel and equip building.

Our best asset is the generous support given to our work by the Mayor and Medical Director of the city government.

Digitized by Google

NEW YORK

CHILD WELFARE ASSOCIATION, INC.

Binghamton

Organized 1913.

I. Staff: 6 doctors, 2 nurses.

II. Total budget, $3,000. Association supported by membership dues and through the Humane Society and Relief Association. The work done by the Association is free of charge. Mothers whose financial circumstances have been improved by the advance in wage continue to attend the conferences.

III. The most difficult problem has been not to allow our free clinics to interfere with private physicians' practice by those who are able to pay. The scope of the work has been enlarged as greater need for the work has been found; have opened one new station, and the Association has moved into larger and more central headquarters.

IV. Activities: Follow-up and instruct prenatal cases. Care for all children of pre-school age in our districts. Nutritional clinics — advise all mothers as to feeding infants. Activities are limited to our own city.

V. Affiliations: We co-operate with Board of Health, Humane Society, Bureau of Charities and City Hospital. There is a Division of Child Hygiene in the State.

VI. As a result of the Children's Year Campaign we now hold Annual Better Babies Contest and Health Conference, with very noticeable improvement in the health and weight of the children, more intelligent care on the part of the mothers, and greater community interest in the health of the children.

VII. The effect of the general advance in wages has been that in the foreign districts more is spent on amusements and clothes, with but slight improvement from the nutritional standpoint. There has been less illness among the babies.

IX. Prenatal Care:

Average number of months under care, about 6 months.

Postnatal:

Eight Infant Welfare Conferences each week.
Fifty babies in attendance each week.
Average age of child brought under our care, 3 or 4 weeks.
Total births for year ending December 31, 1918, 16,071.
Total deaths under 1 year for same period, 145.

JEANNETTE B. SALMON, R. N., *Nursing Supervisor.*

BABIES' WELFARE ASSOCIATION

New York City

The Babies' Welfare Association of New York City was organized in 1912. It is a federation of 170 agencies interested in child welfare. Its Central Office maintains a clearing house for cases and a general information bureau. During the first ten months of 1919, 12,149 babies and young children have been referred by the nurses and social workers of 175 different organizations. This service is available for every one, and so far it has been impossible to estimate the number of individual workers who have sought the assistance thus given them in order that their time may be saved, a greater number of children reached, and immediate care given to every child.

A pocket directory giving all infant welfare agencies, some 400 in number, has been revised and generally distributed so that detailed data concerning facili-

Digitized by Google

ties for caring for, and protecting babies and young children is available for every one interested.

Over 5,000 free ice books have been distributed during the summer months. These books are honored by the large ice companies, and each book grants 15 pounds of free ice a day for a period of one month.

Two new Baby Health Stations have been opened during 1919. The organizations operating them have, through the Babies Welfare Association, been assigned definite district boundaries in which to work, adopted the standard record cards, and are working in close co-operation with the other organization doing similar work.

There are now 87 Baby Health Stations in New York City, with an average weekly registration of 25,000 babies. Uniform records are kept by all and weekly reports sent in to the Babies' Welfare Association for tabulation.

A standard prenatal card and also a uniform set of rules for nurses' instructions to mothers on the care of babies have been adopted by the members of the Association during the past year.

A brief survey has been made upon the employment of unmarried mothers for the inter-city conference on illegitimacy.

The Association is financed by the voluntary contributions of the members of the Association and interested individuals. These funds are secured through general appeals.

MARY ARNOLD, *Executive Secretary.*

CHILD WELFARE DIVISION, BELLEVUE HOSPITAL SOCIAL SERVICE BUREAU

New York City

As a result of after-the-war conditions, we are chiefly occupied in maintaining and continuing the varied branches of our work, rather than adding to it.

In this we are greatly aided by a number of physicians, nurses and volunteers who have returned from overseas and are assisting in all our activities.

MRS. SETH BLISS HUNT, *Chairman, Advisory Committee.*

NATIONAL COMMITTEE FOR THE PREVENTION OF BLINDNESS, INC.

New York City

Organized January 1, 1915 — work of the Committee is educational.

I. The Committee does no case work, hence, the only nurses and physicians are those on the Board of Directors and the Advisory Board.

II. Budget for fiscal year 1919, $19,200. Organization supported by memberships, dues and voluntary contributions. Method of raising funds — personal letters and visits — financial secretary. The work done by the Committee is given free. Quantity lots of literature are charged for to cover cost of printing. Our audiences during the past year have been larger than ever before.

The Committee has continued its special educational work for children instituted during "Children's Year." The intensive study taken up has been on the subject of "Sight Saving Classes in the Public Schools." As a result of this study a manual on the subject has been prepared to aid in the establishing and conduct of such classes throughout the United States.

EDWARD M. VAN CLEVE, *Managing Director.*

Digitized by Google

ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR

New York City

Organized 1843. Education nursing work organized 1907.

I. Staff: Nurses — The Association employs 38 nurses who are engaged in field work of a public health nature. It also employs 18 nurses who are engaged in the Association's institutional work, including sanitariums for tuberculosis, convalescent home for mothers with young infants, fresh air institutions, etc.

Doctors. Four who were paid for their services: two who gave their services without charge.

II. Financial. The total budget for the current fiscal year was approximately $879,000. This covers gross expenditures for all the activities of the Association, some of which, of course, are not directly identified with Child Welfare Work.

The Association is supported by voluntary gifts, donations and legacies. It receives no appropriations from public authorities.

It is impossible to describe briefly the methods that we have found most successful in raising funds. I will say, however, that good work done is the first essential, and persistent effort through press, platform and letter appeals are the chief means employed by us to raise funds.

All of the Child Welfare work done by the Association is done free of charge. Some of our activities such as our public baths have a moderate fee for the use of soap and towels and other social activities in our public kitchens and coffee houses are on a "pay for service" basis. The great bulk of our work, however, is wholly free. This is entirely so, so far as it relates to our public health work for our mothers and young children.

We note little change in the attendance of mothers, whose financial circumstances have been improved by the advance in wages. We find that the financial circumstances of many of the families which we know have not been greatly improved by the advance in wages, inasmuch as the advance in the cost of food, clothing, rent and other necessities of life, has kept pace in New York with the advance in wages.

III. Problems in Maternal Welfare and Child Hygiene. As heretofore, our biggest problem is to arouse the general public sufficiently to get them to demand rapid advances in provisions for improving the physical side of child life. That together with the difficulties of securing an adequate number of well-trained nurses stand out conspicuously.

As a result of present conditions we have increased the scope of our work and it has been somewhat intensified at the same time. The greatest change has been in the development of a community health program in a definite section of a downtown portion of the city where we are undertaking a fairly complete program for dealing with the physical side of child life in a population of about 38,000 Italians. In this we are beginning with pre-natal education. Our chief emphasis, however, has been placed on pre-natal and post-natal educational work, on physical examinations of the pre-school as well as the school child, an intensive work in securing the removal of readily removable defects such as nose, throat and eye conditions, and the organization of special nutritional work for children of pre-school age. The nutritional work is under the direction of trained dietitians and centers in the home, although the children of school age are met weekly in groups. We are developing in this district preventive prophylactic dental facilities for the children of this section.

IV. Outline of Activities: Prenatal and maternal care.— We have had under the care of our nurses during the last year 1,131 mothers for prenatal care. In the group which have received prenatal care, together with infant care, the death rate under one month has been .19 per thousand children born, as compared with 37 per thousand children born in the total population of the City of New York.

Digitized by Google

Infant care.— There were in these families 404 infants under two years of age, exclusive of the new-born babies. Also, 932 children between the ages of two and five years.

Pre-School Age: The best work which we are doing for children of pre-school age is in the district mentioned under the answers to III. In both the pre-school age and school age we are securing careful medical examinations and are addressing ourselves intensively to the removal of child defects and to the prevention of the development of others. In addition to the work in this district, we are carrying on the same general kind of work in all of the families known to the Association scattered throughout the different parts of the boroughs of Manhattan and the Bronx. We also do work, although not so intensively, with a large number of additional school children and pre-school children through our Summer Fresh Air work which takes a large number of mothers with young infants and boys and girls out of the city for rest periods of two weeks. We keep a height and weight chart on each child in every family under care.

Nutritional clinics: We now have a staff of eleven dietitians who are engaged in nutritional work. This work always centers in the home, includes weekly weighings of the children and conferences with the mother and a thorough going intensive effort to bring defective nutrition cases back to a normal condition.

Our work is wholly limited to the Boroughs of Manhattan and the Bronx in the City of New York.

V. Affiliations: The Association's work is closely affiliated with hospitals, day nurseries, with other relief organizations, with the city and state Departments of Health and with many other organizations of a philanthropic or educational nature. The contacts are daily and vital and too numerous to describe in a paragraph.

IX. Statistical. A. Prenatal Care: Total number of mothers cared for during the year, 1,131.

D. Total births in New York City for year ending December 31, 1918, 138,046.

Total deaths under 1 year in New York City for year ending December 31, 1918, 12,657.

There has been an increase in the death rate among children under one year in New York City in the last year.

1917 infant mortality rate, 89.

1918 infant mortality rate, 92.

BAILY B. BURRITT, *General Director.*

OHIO

THE CHILDREN'S CLINIC AND BABY MILK FUND ASSOCIATION OF CINCINNATI

(Formerly "The Children's Clinic of the Ohio-Miami Medical College")

Cincinnati

The Children's Clinic presents a report of its activities for a period covering two and a half years, namely, from January 1, 1917, to June 1, 1919.

The demands of the war, heavy though they were, were more than met by the Children's Clinic. During the early months of 1917, we were faced with two obstacles, namely the loss of over half of our clinicians and nurses and our reestablishment in new quarters in the Cincinnati General Hospital. However, in spite of these obstacles, this organization has continued to serve an increasing number of babies and children, as shown by the statistical reports. In addition the plans for the development and extension of the work have progressed steadily.

Digitized by Google

Throughout the war the Children's Clinic, in addition to its regular duties, carried on the work of the national campaign for child conservation in close relation with the local council of National Defense.

The accomplishments and activities during the past two and one-half years can be briefly summarized as follows:

Maintained all its regular activities in the Main Dispensary, Infant Welfare and Milk Stations and supplied milk at a reduced rate or when necessary, free of cost, to infants, nursing mothers and anemic and mal-nourished children.

Affiliated more closely with and assumed all the nursing work of the Cincinnati Maternity Society and continued to follow up all its babies for two years or more.

Affiliated with the Child Welfare Committee of the Woman's Council of National Defense, assisting in the carrying on of the County Infant Welfare Work and in the establishment of the Children's Dental Clinic in the Cincinnati General Hospital.

Assisted in the establishment and partially supported the school for the Handicapped Children on the roof of Pavilion H of the Cincinnati General Hospital.

Maintained a Wet Nurse Directory; supplied and paid wet nurses for the Children's wards of the Cincinnati General Hospital.

Established two additional Infant Welfare Stations, making four stations in all. Established a diagnostic venereal clinic for mothers and children at the Humane Society Building.

Maintained a loan and supply closet from which bed linen and articles of clothing were supplied to the needy poor.

Carried on an educational campaign through exhibits, home demonstrations by nurses and doctors, and newspaper publicity.

Provided educational opportunities for students of the Ohio-Miami Medical College of the University of Cincinnati and for pupil and post-graduate nurses of the Cincinnati General and affiliated hospitals in the Public Health Course of the Cincinnati General Hospital School of Nursing and Health.

Extended its activities in boarding and supervising babies in properly investigated home.

Directed the activities and assisted in the standardization of the Walnut Hills Colored Day Nursery and Parkway Day Nursery.

Carried on home investigations in co-operation with the Cincinnati General Hospital Social Service Department in all the children's cases and followed up especially those that showed cardiac, orthopedic or intestinal complications.

Co-operated very closely with the Pediatric Department of the Medical College of the University of Cincinnati and in that way was brought into the closest possible touch with the Pediatric Dispensary and with all the other dispensaries, which are included in the Out-Patient Department of the University of Cincinnati; through these connections was brought into close co-operation with the Cincinnati General Hospital.

During the influenza epidemic took charge from October 12, to December 23, 1918, of all influenza cases requiring nursing care in one district, caring for 275 cases and making 926 calls. In addition supplied nurses to the Cincinnati Orphan Asylum and Jewish Foster Home when the epidemic invaded these institutions.

Co-operated very closely with the Cincinnati Health Department, especially in the carrying on of the Infant Welfare and Milk Station work and in emergencies, such as during the influenza epidemic, united forces and solved many difficult nursing problems in the homes and institutions of the poor.

MRS ADA S. STOKES, R. N., *Superintendent of Nurses.*

Digitized by Google

BUREAU OF CHILD HYGIENE

DIVISION OF HEALTH

Cleveland

Organized 1911.

I. Staff: 70 to 78 nurses — about to be increased by 18. 16 doctors, all paid for their services.

II. Financial: Total budget $223,861. Bureau supported by appropriation from the city.

Fee of $1, or less, for demonstration of milk modification, is asked, if well able to pay.

Mothers whose financial circumstances have been improved by the advance in wages, continue to attend our conferences.

In most instances a fee has willingly been paid.

IV. Activities:

Prenatal and maternal care: 4 Prenatal clinics a week.

Infant care: 14 Infant Welfare Stations; Milk supply furnished in co-operation with the Babies' Dispensary and Hospital; infant eye care and supervision of midwives; supervision of boarding homes; licensing day nurseries.

Pre-school age: Supervision of day nurseries and boarding homes.

School age and adolescence: Physical examination and medical supervision of the Fresh Air Camp; inspection of parochial school children.

Boarding homes are licensed by the State Board of Charities, but the local work is delegated to the Bureau of Child Hygiene, and the investigating is in turn delegated to the Humane Society.

We have the supervision of 3 county nurses and 1 suburban nurse (Lakewood).

V. Affiliations:

Co-operate with the Babies' Dispensary and Hospital which cares for sick babies and assists in providing milk supply.

We refer sick cases to hospitals, and teach medical students (seniors) in infant feeding and hygiene.

Co-operate with Cleveland Welfare Federation, Associated Charities, Humane Society, Fresh Air Camp, etc.

There are divisions of Child Hygiene in the City and State.

IX. Midwives: 34 per cent of births in Cleveland were attended by midwives.

Postnatal Care:

Age limit of babies or young children under our care has been the pre-school age.

Total number under 1 year cared for, 4,614 new cases; 6,680 individual cases in 1918. Nearly all under 15 months.

46 infant welfare conferences each week; average number of babies in attendance, 636 in 1918.

22 per cent of the babies born in Cleveland during the calendar year came under the supervision of our organization.

Total births in Cleveland for year ending December 31, 1918, 21,059 (living).

Total deaths under 1 year in Cleveland for same period, 2,010.

There has been a decrease in the death-rate among the children under 1 year in Cleveland in the last year.

R. J. Ochsner, M. D., *Chief, Bureau of Child Hygiene*

Digitized by Google

DAY NURSERY AND FREE KINDERGARTEN ASSOCIATION

Cleveland

Organized, 1882; incorporated, 1894.

I. Staff:

Nurses. At present two of our five superintendents of nurseries are graduate nurses.

Doctors. Employ one paid physician, who gives a forenoon's time five days a week. Employ a dentist three hours per week. Have no physician who gives services free of charge (some of the children are examined at the free city dispensaries).

II. Financial:

Total budget for the current fiscal year, $75,665. Earnings — fees and tuitions, $11,216; endowments, $31,387; gifts needed, $33,062. (This comes through Welfare Federation, from the Community Chest.)

Fees. At some of our kindergartens a five-cent fee is collected if the parents are able to pay it.

In the Kindergarten Training School the tuition is $125 per year.

At the nurseries everyone pays a fee. A sliding scale is used, the minimum fee being ten cents for the first child and five cents for each additional child from one family. The maximum fee is fifty cents per child. The amount asked is gauged by the family budget (the Associated Charities schedule is used). We do not ask enough to use up the margin of the family budget provided they show a disposition constantly to raise their standard of living. This sliding scale, therefore, has worked no hardship and there have been no hard feelings, because it has been explained to each mother and she comes to be glad to pay as much as possible toward the cost of her child's care.

III. Maternal Welfare and Child Hygiene.

A. We have had difficulty in always being able to get proper care for convalescing children who are not sick enough to be in the hospital wards and yet not well enough to be O K'd by the doctor for admission to the nursery.

B. After-the-war conditons: There have been increased numbers at the nurseries; this is probably due to the marked growth in population, while there have been but two new nurseries in the whole city.

IV. Activities. (Our work does not fall within the outline for this question.)

A. A city ordinance forbids any day nursery accepting children under six months of age. None are accepted under one year of age except by doctor's permission. We give certified milk to all children under fifteen months of age. We have full medical examination for all children. This is not only to detect any contagious disease, but includes a corrective program.

B. Dental care is also provided (see No. X for doctor's full report) and (see No. VI for health program, including the plans for weighing and measuring the children).

C. At two of the nurseries we have a community kitchen where the food made by the cooking classes is sold at cost to the mothers for the evening meal.

D. Our activities are limited to our own city.

Digitized by Google

V. Affiliations.

A. All cases applying for care are referred to the Social Agencies Clearing House for registration; we are then given the names of any other agencies interested in the case.

B. The hospitals do our tonsilotomy work.

C. We are not a relief-giving agency. The Associated Charities, the Catholic Charities and the Out Door Relief Department of the city put relief into the home when such is necessary.

D. We have a license from the city and one from the State Department of Health. We are frequently in touch with both. At the request of the City Board of Health our Association makes investigation of any one applying for a day nursery license in the city.

VI. Results of Children's Year Campaign: We did the weighing and measuring as requested for the Children's Bureau. Our interest in the matter was started by Dr. Caroline Hedger of Chicago, at the National Day Nursery Conference at Atlantic City, June, 1919. We purchased scales for each of the nurseries (the kindergartens are later to be included in this work). We have had weight charts for recording the weight twice a month made up (we are using Dr. Holt's weight scale for this). In order to stimulate the children's interest we are using colored stars on the charts; a blue star indicates underweight, a red star indicates "over-the-top" weight. Another story is told by recording the weight numbers in blue and red ink; red ink indicates not only "over-the-top" weight, but it is also used to record the weight of a child, who, though underweight, is making gain; blue ink indicates underweight without gain. We find the *Cho Cho Health Primers*, put out by the Child Health Organization, very helpful. We expect to have "over-the-top" contests. We feel that this is but the beginning of a broader health program. It is quite possible that we shall later employ a visiting nurse to do the follow-up work in the homes.

VII. Advance of wages and standards of living. Our mothers are of all nationalities — we have no statistics as to the number from each country. The majority of our mothers do day work, and their wages have not begun to keep pace with the increased cost of living. Our children are well-nourished because of the quality and quantity of the food they are fed at the nurseries. It is the impression of our field workers that there are more anaemic and uncared-for children in their districts than previously.

VIII. Wages and the milk situation: We cannot give an estimate of the increase or decrease of milk purchased by our families. Our Association has always bought all the milk the children want while at the nurseries. Our minimum is a pint per child daily. At one of the kindergartens all of the children are given milk; at others milk is provided for those whom the doctor considers anaemic.

IX. Statistics:

A. Attendance:

Nurseries:

In the five day nurseries there was an *aggregate attendance* of 42,889 children.

For five days a week, 10 months of the year (the nurseries and kindergartens were closed during the "Flu" epidemic, at which time we ran five "Flu" hospitals for children) we had a *daily attendance* of 188 children.

In the nurseries during the year there were 754 children from 440 different families.

Digitized by Google

Kindergartens:

In the seven kindergartens there was an *aggregate attendance* of 40,964 children.

For five days a week, eight months of the year (see note above, under nurseries) we had a *daily attendance* of 247 children.

B. The following is the Medical Director's report for the year October 1, 1918, to September 30, 1919: 204 visits have been made; 741 examinations and 2,314 inspections were made; 238 children were vaccinated and 60 throat cultures were taken (from this number there were 41 exclusions made); 619 of those examined (as noted above) were new children; 96 cases of diseased tonsils and adenoids were found, and of this number 39 underwent operations; 173 children were found having bad teeth and 61 of these cases have been treated.

GENEVIEVE M. CARR, *General Secretary*

DISTRICT NURSES ASSOCIATION

Organized 1901. **Toledo**

I. Staff: 28 nurses, 9 doctors.

II. The Association is supported by the Community Chest, and generalization work is done, hence, cannot state amount of budget. The work done by the Association is both free and paid. The fee is on a sliding scale up to 75 cents. The mothers, whose financial circumstances have been improved by the advance in wages, continue to attend the conferences.

III. The most difficult problem has been the lack of physicians. The scope of our work has been enlarged by the opening of more stations; the forming of Little Mothers' Leagues in the Schools; also work along the line of movies, pamphlets, etc.

IV. Activities:

Prenatal care: Opened an additional prenatal clinic in a foreign district, with one nurse for care during labor.

Nutritional clinics, one class.

Work is also carried on in the county.

V. Affiliations: We co-operate with all agencies. There is a Division of Child Hygiene in the city.

VII. There has been very little improvement in health and general welfare babies through the advance in wages. More of our foreign mothers are engaged in some work outside of their homes.

VIII. The amount of milk bought for babies and children has increased.

IX. Prenatal Care:

749 mothers cared for during the year; average number of months under care, 3 months.

Total number of infant deaths during first month, 265.

Total number during the first year of life, 520.

16.4 per cent of births attended by midwives.

Postnatal Care:

The age limit of ladies or children under our care is 2 years.

Total number under 1 year and between 1 and 5 years cared for was 3,332.

We have 12 Infant Welfare conferences each week.

Average attendance of babies, 10 per clinic.

Child at birth for all prenatal cases brought under our care.

Average case, 1 month: earliest case, 1 day.

Total births for year ending December 31, 1918, 5,512.

Total deaths under 1 year for same period, 520.

Digitized by Google

THE BABIES' HOSPITAL

Philadelphia

Organized June, 1911.

I. Staff: Nurses, 6 to 20; doctors, 14, none of whom were paid for their services.

II. Total budget for the current fiscal year, $26,125. The hospital is supported by membership dues and contributions. No fee charged, but contributions encouraged.

IV. Activities:

Prenatal and maternal care: Weekly prenatal clinics, with visiting nurse in homes.

Infant care, pre-school age, school age and adolescence: Daily clinics for children under 3 years of age. Summer hospital of 60 beds for children under 3 years of age. All cases followed until 6 years of age.

V. Affiliations: Co-operate with hospitals and medical schools, relief organizations, City and State Departments of Health.

VIII. The amount of milk bought for babies and children has increased.

IX. Statistical:

A. Prenatal Care:
Total number of mothers cared for during the year, 100.
Average number of months under care, 3½.
Average cases, 4th month.
Earliest case, 2d month.
Total deaths of mothers:
During pregnancy, none.
At childbirth, none.
During the puerperium, none.

B. Midwives:
Percentage of babies cared for whose births were attended by midwives, 11 per cent.

C. Postnatal care, infant care, pre-school age and old children:
Age limit of babies or young children under care, 3 years.
Total number under 1 year cared for, 311 dispensary, 57 hospital.
Total number of children, ——.
Followed up to 6 years, 1,566.
Total number of Infant Welfare conferences each week, 6.
Average number of babies in attendance each week, 90 to 100.
Average cases, 9 to 12 months when enrolled.
Earliest case, 2 weeks when enrolled.

RENA P. FOX, R. N., *Superintendent*

BABIES' WELFARE ASSOCIATION

Philadelphia

Organized March 30, 1914, and incorporated April 22, 1918.

I. The work of the Association is carried on by the members of the Board of Directors, who are selected to represent the different fields of activities pertaining to the welfare of babies and small children. All the work is gratuitous. There is one paid executive in charge of the central office.

Digitized by Google

II. The total budget for the current year is $4,000. The Association is supported by voluntary contributions and membership dues. The most successful method of raising funds is by personal appeal. No fee or contribution is asked for any of the work that is done by the Association.

III. The Babies' Welfare Association, in common with other organizations, has felt the effect of the war, in that it was more difficult to get the people to maintain the great interest necessary for effective work. From Philadelphia alone over 1,000 physicians had entered the Federal service, so that in many respects we were badly crippled. However, the physicians and nurses have returned and it is our intention to make use of every available agency to join with us in an intensive campaign for the coming year and we have planned to use as a slogan "More education, less medication," preventive rather than curative measures.

IV. Activities: The Bureau of Information in the central office has had many calls during the year for information such as how to obtain literature on the care of the baby; how to secure free milk for babies; to whom to report unclean milk; where to secure babies for adoption; what hospitals will take babies having certain diseases; how to report cases needing investigation; where to place children when the mother is sick in the hospital; how to secure a wet nurse; location of day nurseries; where to procure visiting nurses, etc.

A new activity of the Babies' Welfare Association was the scientific discussion of infant welfare work at public meetings which were held monthly during last winter and are to be resumed this coming winter. Important subjects were taken up and discussed by the members of the Association and their guests. Leading authorities were secured as speakers on the subjects under consideration.

The first meeting held in September was on "Maternity and Infant Welfare" when the subjects of the addresses were: Birth Registration — A National Service; The Reduction of Maternal Mortality; and The Demands of Wartime Obstetrics. At this meeting it was shown quite clearly that every means possible should be taken to stimulate birth registration. It was also shown the necessity for the registration of maternity cases, so that expectant mothers could receive the necessary care and instruction. It was urged that prenatal clinics be established in certain additional sections of the city.

At the second meeting, held in November, which was conducted jointly by the Philadelphia County Medical Society and the Babies' Welfare Association, Dr. J. H. Mason Knox of Baltimore, Assistant Director of the Children's Bureau of the American Red Cross in France, gave an illustrated talk on the work done for the betterment of the children in France.

The subject for the third meeting, held in December, was "The Economic Aspect of Infant Welfare," and the program was as follows: The Effect of Industrial Home Work on Infant Welfare; Mothers in Industry; and What Income Is Safe for the Baby's Health. At this meeting it was shown that the baby's health is not safe unless the father is receiving a living wage, and that home work should be prohibited. People do not seem to understand that motherhood is a vocation for which time, intelligence and training are necessary. There should be more training for parenthood if we are going to bring up healthy children.

"The Prevention of Disease" was the topic for discussion at the January meeting and the subjects were: The Administrative Control of Whooping Cough; Diphtheria — Its Elimination; Hereditary Syphilis and Its Prevention; and The Prevention of Respiratory Diseases of Infancy. At this meeting it was clearly shown that whooping cough is a great menace to health and life; that there should be a closer supervision and isolation of all suspicious cases, and that parents cannot be too careful in protecting their children from this disease. In the elimination of diphtheria a measure of great value, which should be more generally used, is the Shick test to determine whether or not the child has a natural protection against diphtheria. It is considered not at all improbable that before many years we can be as free from diphtheria as we are from smallpox.

Digitized by Google

At the meeting held in February, "The Expectant Mother" was the subject, and the papers were as follows: The Possibilities of the City Nurse in Prenatal Work; the Value of Prenatal Work from a Community Centre; The Importance of Prenatal Work from the Viewpoint of the Physician; and The Present Status of the Wasserman Test in Prenatal Work. It was shown that prenatal work is the most important baby welfare work being done at the present time. It aids the mother in avoiding the complications of pregnancy and confinement and guarantees, as far as possible, a normal living baby. In order to attain this aim we have to combat ignorance, negligence and injurious habits; we must provide against poverty and consequent undernourishment; we must emphasize the necessity for decent living quarters, which will permit of privacy, light and ventilation. Community centers are able in a large measure to remedy these conditions. The possibilities of the city nurse in prenatal work are unlimited. We should do everything in our power to induce city councils to appropriate a large enough sum of money for the Division of Child Hygiene, so that the city nurses' work could cover the entire city.

A "Conference in Eugenics" was held in April. The papers under discussion were: The Relation of the Birth Rate to Infant Mortality; The Teaching of Practical Eugenics, and Possible Eugenic Programs. At this meeting the course on eugenics taught in the high school for girls was outlined and its benefits explained. Experience has taught that the best avenue of approach to the subject is through domestic sanitation and home nursing. This would include a study of the family, the home, cleaning, heating, lighting, and sanitation. The latter leads naturally to the study of infectious diseases, insect carriers, disinfectants, quarantine, and the Board of Health. We should not rush hastily in placing this study in schools. Teachers should be prepared in normal schools and collegs. The country is awake to its need, the demand for it is coming, and it is to be hoped that in the near future we will have a course in practical eugenics in every school.

The last meeting of the season held in May was "A Conference on Nutrition," and the program was as follows: The Problem of the Undernourished Child of Pre-school Age; The Visiting Dietitian; and Philadelphia's Milk Supply. It was stated that one-fifth of the population reaches school undernourished. It is a threefold problem — discovery, prevention and cure. Prevention was begun but the results were offset by the war. Discovery of cases and efficient treatment depend on the co-operation of physicians, nurses, social workers, teachers with parents to correct physical defects, improve diets, habits and sanitation. School children are the best advertising agency and we must make them healthy before they reach the school age.

Prenatal Care: The Prenatal Committee of the Babies' Welfare Association has formulated a monthly record blank for use of social service workers to assist them in keeping their records and to enable them to answer more accurately the annual questionnaire sent out by this Association. Each year the Committee revises the questionnaire sent to all organizations doing prenatal work, adding new questions with the idea of bringing the work up to a higher standard. All physicians in charge of the prenatal clinics in the organizations which are members of the Babies' Welfare Association have been made members of the Prenatal Committee of the Association, thus materially increasing the interest in this work throughout the city.

The Committee has established in two hospitals health clinics for mothers of *child bearing age* and advocates the establishment of such clinics throughout the entire city. Also the adoption of a birth record card to be given to each mother upon dismissal from the maternity, teaching the mother the importance of such a record card being kept in her possession. The Committee urges the great importance of a well organized social service department in connection with each organization doing prenatal work.

Digitized by Google

	Babies' Hospital	Children's Homeopat. Hospital
1. Do you maintain a Prenatal Clinic?	Yes	Yes
2. Do you co-operate with a maternity or hospital?	Yes	Own
3. Give total number pa ients given prenatal care during past year?	100	No data
4. Give total number of patients given prenatal care who were delivered during past year?		
Interrupted pregnancy	1	.....
Premature	1	.....
Full time	76	.....
5. How many patients received prenatal care, and how many consultations were held with each patient either at home or in the clinic, from:	(Pa.— Number of (Con.— Number of c.	
	Pa. Con.	Pa. Con.
2d month to delivery	7 208	..
3d month to delivery	11 200	..
4th month to delivery	10 232	..
5th month to delivery	11 182	..
6th month to delivery	15 186	..
7th month to delivery	12 132	..
8th month to delivery	12 82	..
9th month to delivery	.. ...	..
6. What was the average length of time between visits to home by nurse?	10 days to 2 weeks	.....
7. What was the average length of time between visits to clinic by patient?	About 1 month	.....
8. How many of these babies were living one month after birth?		
Premature	0	.....
Full time	75	.....
9. How many of these babies were breast fed one month after birth?		
Premature	0	.....
Full time	75	.....
10. How many of these babies were given postnatal care or referred to other agencies for care?		
Own	75	.....
Referred	.....	.....
11. State number of cases of gonorrhoeal eye infection:	0	
Results — Perfect vision	.....	.....
Impaired vision	.....	.....
Total loss of vision	.....	.....
12. State number of cases of eye inflammation not gonorrhoeal in nature	0	.....
Results — Perfect vision	.....	.....
Impaired vision	.....	.....
Total loss of vision	.....	.....
13. Do you make routine Wassermann test of each patient?	If possible	.....
If so, how many positive reactions?	1	.....
How many negative reactions?	.....	.....
14. Do you make routine microscopical examinations of vaginal secretions?	Yes	.....
If so, how many show presence of gonococcus?	1	.....
15. Is the blood pressure of all patients taken upon each prenatal visit?	Yes	.....
16. Is a specimen of urine collected from all patients at each prenatal visit?	Yes	.....
COMPLICATIONS OF PREGNANCY		
17. How many cases of interrupted pregnancy (up to 6th month) treated?	1	.....
Give results	Aborted	.....
18. How many cases of threatened eclampsia treated?	.....	.....
Give results	0	.....
19. How many cases of nephritis treated?	0	.....
Give results	.....	.....

Digitized by Google

Starr Centre Association
Yes
Yes
202
4 0 95
Pa. Con. 8 342 18 772 15 565 13 454 13 389 8 181 24 279 .. ...
7 days
10 days
0 91
0
B 89, 1 Mix. 1 bottle
78 13
0 ....
2 Perfect ....
No ....
No .....
Yes
Yes
1 Aborted
3 1 aborted 2 cured

Digitized by Google

The following standard for the minimum amount of prenatal care which each expectant mother should receive has been adopted by the Babies' Welfare Association.

> "Patient seen once every month until 5th month of pregnancy, then every two weeks until 7th month of pregnancy, and after that every week until delivery."

The activities of the Babies' Welfare Association are limited to the City of Philadelphia.

V. Affiliations: Practically all of the organizations in Philadelphia doing work either directly or indirectly for the welfare of babies and small children are members of the Babies' Welfare Association. Special conferences are held with representatives of the various institutions to discuss problems pertaining to their own particular field of work and constructive suggestions and plans are formulated for consideration. There is a Division of Child Hygiene in Philadelphia and one in the State of Pennsylvania.

VIII. When the price of milk was raised the sales decreased 10 per cent to 12 per cent for the first few weeks of the year 1918, but gradually became normal. At the present time there has been a considerable increase in consumption for the reason that public schools have lectured on the value of milk as a food for children, likewise the Government has distributed great quantities of educational literature on the subject.

The amount of milk consumed in Philadelphia is 550,000 quarts a day, or six-tenths of a pint a person. Ninety-seven per cent of the city's milk is pasteurized and the deaths from diarrrhea and enteritis decreased from 2,233 in 1910 to 1,383 in 1918, although the population increased from 1,555,000 to $1,800,000.

IX. Statistical: The approximate percentage of births in Philadelphia attended by midwives in the year 1918 was 15-5/10 per cent.

Total births in Philadelphia during the year ending December 31, 1918, 42,904.

Total deaths under one year for the same period was 5,321, as follows

Transmissible diseases, excepting tuberculosis and pneumonia	503
Tuberculosis	74
Pneumonia	1,056
Diarrhoea and enteritis	1,159
Congenital debility and malformations	1,483
All other diseases	1,046
	5,321

There has been an increase in the death rate among children under one year in Philadelphia in the year 1918 owing to influenza epidemic.

Each year the Babies' Welfare Association sends a questionnaire to the various agencies doing prenatal work and the results are compiled and sent to the agencies interested. In 1914, the first year the questionnaire was sent out, there were 13 replies received. At the present time there are 28 hospitals and institutions doing some phase of prenatal care. The tabulated statement accompanying this report is a survey of the work of twenty agencies. Unfortunately on account of war conditions and the influenza epidemic some of our organizations doing maternity work were very much handicapped for want of assistants and are unable to give a report of their work for last year. A number of the hospitals have enlarged their maternity departments, clinics have been started recently at three of the hospitals and several are planning to have a prenatal nurse in their social service department. (*See accompanying tabulated statement.*)

Digitized by Google

RHODE ISLAND

DISTRICT NURSING ASSOCIATION

Providence

I. The Providence District Nursing Association, organized in 1900, now has a staff of 49 nurses, 12 of these nurses doing the child welfare work.

II. The budget for the current year is about $50,000. The organization is supported by contributions, receipts from patients, an annual donation or tag day, Metropolitan Life Insurance Company (for the care of their industrial policy holders) and an appropriation of $5,000 from the city of Providence. All patients are asked to pay what they can for the nurse's services. If they cannot pay the service is rendered without charge.

III. Our work has gone on about as usual. Our most difficult problem the past year being the effect of the high cost of living among our families.

IV. Four nurses have been added to our staff during the past year. Our children's nurses do the prenatal work and do the follow-up work on all children from birth to school age, follow up all cases seeking admission and those discharged from the Lying-In Hospital.

The births attended by midwives are cared for for one month by the City Health Department nurses and are then turned over to this Association.

V. Our work is confined to the City of Providence. We have the most splendid co-operation from the hospitals and relief organizations, with the City and State Department of Health and with the Division of Child Hygiene, both in the City of Providence and the State of Rhode Island.

VII. In regard to the general advance in wages, our families have not been as well off, as the purchasing power of the dollar has so materially decreased. The amount of milk bought for babies and children has decreased. There has, however, been less illness of all classes of people in the city this past year.

IX. During the year ending September 30, 1919, our children's nurses cared for 3,144 cases.

There have been 1,693 births attended by midwives this past year.

The Infant Welfare Conferences in Providence, of which we have five each week are run by the Mothers Congress, the Council of Jewish Women and the City. One of the baby nurses is always in attendance at the conferences.

Practically all babies born in Providence come under the supervision of our Association if necessary.

The births in Providence for the year ending December 31, 1918, are not as yet tabulated. The deaths under one year in Providence for the year ending December 31, 1918, were 788.

There has been a decrease in the birth rate of Providence of children under one year for the past year.

WINIFRED L. FITZPATRICK, R. N., *Associate Superintendent*

TEXAS

GRADUATE NURSES' BABY CAMP AND HOSPITAL

Dallas

Organized April 1, 1913.

I. Staff: 3 physicians, 2 nurses, 4 assistants. Physicians' services free.

II. Budget, 1918–19, $8,500; budget, 1919–20, $12,500; raised through financial federation of city-wide charities under Welfare Council and pay patients. Most

Digitized by Google

service free. Some pay patients at $10 per week. Mothers continue to seek advice, and effect is good.

IV. Infants under two years. Many patients come from throughout the southwest.

V. The hospital is an independent institution, but is closely related to hospitals, medical schools and social agencies. There are both local and state divisions of child hygiene.

VII. Standards of living, health and general welfare have improved. Less illness among babies and older children. Colored mothers improved. We have little or no immigrant problem.

IX. Statistics:

Infant Deaths:
First month, 130.
First year, 283.
Attended by midwives, 6.6 per cent.
Age limit, 2 years.
Number under 2 years, 204.
Babies received as early as at birth.
The equivalent of 8 per cent of babies born in Dallas have had care in hospital.
Total births in Dallas, 2,536.
Total deaths under 1 year, 1918, 283.
Total deaths under 1 year, 1917, 122.

WISCONSIN

BUREAU OF CHILD HYGIENE

HEALTH DEPARTMENT

Milwaukee

I. We have in the Milwaukee Health Department a Bureau of Child Hygiene, which consists of Child Welfare work as well as public and parochial school work. The Child Welfare staff consists of 30 part-time nurses, 1 full time and 1 part-time physician. Our 30 nurses do community nursing, which includes parochial school work, Child Welfare and tuberculosis work. The public school hygiene department has just been transferred to the Health Department, and we are about to increase our nursing staff of 30 to 70. These 70 nurses would then, of course, all do community nursing as our 30 nurses are doing at present. All of our employees are paid by the city. We have very few volunteer workers.

II. The total budget for Child Welfare work might be estimated approximately at about $25,000. We charge nothing for our services. Our Child Welfare clinics are attended by the wealthy as well as by the poor.

III. The most difficult problem we have is to get mothers whose children need attention the most to attend our clinics. Mothers who, as a rule, neglect to call a physician when the child is sick are the same ones who neglect to call upon the Health Department when the child is sick, even though they get such service gratis. We encourage mothers to come to our stations for prenatal work, but so far we have not had many such cases.

IV. Our Child Welfare Division takes care of children from the time they are born until they enter school, when they are then turned over to the school division. At the present time we are not doing any work on children who leave school and enter industry, but are planning to employ at least one doctor and nurse for that work for the coming year. We are endeavoring to conduct nutritional clinics in

Digitized by Google

all schools, both parochial and public, by furnishing these schools with scales, records and other printed matter, and asking the teachers to weigh their children once a month, and giving banners to the rooms that show the best weight record. We are planning also to conduct nutritional clinics outside of school similar to those being carried on at the present time at Bellevue Hospital, New York.

V. We have the co-operation of many organizations in our city. We refer our cases for treatment to the Milwaukee Infants' Hospital, Milwaukee Children's Hospital, Marquette Dispensary, and Infants' Fresh-air Pavilion of the Health Department.

VI. The results of the Children's Year Campaign, as far as I see, have not been as satisfactory to our department as they should have been. The work was carried on mostly by inexperienced people who were fascinated more by the novelty of the thing than by the results that were to be obtained. As soon as the novelty wore off, their enthusiasm ceased. No doubt, the weighing and measuring had some educational value, but the follow-up work was entirely neglected by the people who did the weighing and measuring, and our department, with its small force of workers, was unable to enlarge its program sufficiently to do this follow-up work as it should have been done. There is no question in my mind that there is more public interest in the health of children than there ever has been before, for which, no doubt, various campaigns carried on by the Children's Bureau, Red Cross, Wisconsin Anti-Tuberculosis Association and the Milwaukee Health Department are responsible.

VII. The general advance in wages and the high cost of living, I believe, have not been beneficial to the younger children. The tendency is for mothers and older children to go to work on account of the high wages, and take the younger children to day nuresries or leave them with children too young to give them proper care.

VIII. The amount of milk bought for babies and children during the year, I am certain, has increased and not decreased. Milk here in Milwaukee is not much higher than in previous years, and educational campaigns carried on advocating the use of milk have brought results.

IX. We had, during 1918, 1,875 deaths of children under 5 years; at birth, 392: during the first month, 557; during the first year of life, 1,318. Midwives attended about 25 per cent of births. Percentage of babies on our roll attended by midwives is about 30 per cent. We conduct 14 infant welfare stations, at each of which we have 1 clinic per week. The average attendance each week per clinic is about 20 babies. The cases brought to us are mostly feeding cases under 6 months. Our Child Welfare Division makes at least 1 call on every child born. They are then classified according to the amount of subsequent attention they will require.

The births for 1918 numbered 11,697. However, we are convinced that at least one or two thousand births are not reported. This, of course, raises our infant mortality rate. There has been an increase in the death rate of children under one year during the last year.

JOHN P. KOEHLER, *Deputy Commissioner of Health*

Digitized by Google

CONSTITUTION AND BY-LAWS

Digitized by Google

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

CONSTITUTION

Article I — Name

The name of this Society shall be The American Child Hygiene Association.

Article II — Objects

The objects of the Association shall be:

(a) The study of child hygiene in all its phases;

(b) The dissemination of knowledge concerning child hygiene and the methods of preventing morbidity and mortality among children;

(c) The stimulation and encouragement of measures for promoting the health of children.

Article III — Meetings

The meetings shall be held at such times and in such places as may be directed under the By-Laws.

BY-LAWS

Article I — Membership

This Association shall consist of six classes of members: (a) Active Members; (b) Life Members; (c) Sustaining Members; (d) Contributing Members; (e) Honorary Members; (f) Affiliated Organizations.

(a) Those persons subscribing to the invitations for members at the Conference called by the American Academy of Medicine at New Haven, November 11–12 1909, and such persons as shall from time to time express a desire to become identified with the Association may become members so long as they comply with the provisions of the By-Laws. The dues of Active Members shall be Five Dollars ($5.00) a year.

(b) Persons may become Life Members upon the payment of Two Hundred Dollars ($200).

(c) Persons may become Sustaining Members on the payment of Twenty-five Dollars ($25) a year.

(d) Persons may become Contributing Members upon the payment of Ten Dollars ($10) a year.

(e) Persons distinguished for eminent services in the study or prevention of infant mortality may be elected Honorary Members.

(f) Organizations pursuing objects in harmony with the objects of this Association may become Affiliated Members according to the terms set forth in Article X.

Article II — Board of Directors

Section 1. The Association shall, at its first meeting, elect a board of thirty directors, divided into five groups of six each, to serve one, two, three, four and five years, the duration of office to be determined by lot.

Digitized by Google

The Board of Directors may hereafter, at the annual meeting or at a special meeting of the Association, be increased in multiples of five to at most one hundred, the additional members to be assigned to groups in accordance with the provisions of the preceding paragraph of this section. At least one-third of the total membership of the Board shall consist of persons not engaged in the practice of medicine. The election of new Directors who fail to qualify as members within three months after notification of election shall be declared void.

SECTION 2. The Board of Directors shall make its own rules; the government of the Association, the planning of work, the arrangements for meetings and congresses, and all other matters pertaining to legislation and direction shall be in its hands; committees shall have the power to execute only what is directed by the Board.

ARTICLE III — ELECTION OF OFFICERS

The Board of Directors shall annually elect from its own number a President, two Vice-Presidents, a Secretary and a Treasurer, who shall be officers of the Association, as well as of the Board. The President-elect shall be installed at the annual meeting following that at which he was elected.

The Board of Directors shall, at its first meeting, elect also a President to serve for the immediate year.

A vacancy which occurs during intervals between the annual meetings in the office of Secretary or Treasurer, may be filled for the unexpired term by appointment by the President, subject to approval by the Executive Committee.

ARTICLE IV — COMMITTEES

SECTION 1.* The Board of Directors shall appoint an Executive Committee consisting of ten of its members of whom the President, President-Elect, and Secretary ex-officio, and the retiring President shall be members.

In addition to the above 10 members of the Executive Committee, there shall be one member, at large, to represent especially the members and affiliated organizations of the Pacific Coast and Far West. This member and the two Vice-Presidents shall be notified of all meetings of the Executive Committee, and if present, shall each have a vote on all subejcts.

SECTION 2. The President with the approval of the Executive Committee, shall appoint such committees and representatives as may be necessary for scientific and educational work. The President shall appoint at the organization meeting of the Executive Committee the Chairmen of Committees responsible for the Section work at the following annual meeting.

SECTION 3. The Executive Committee shall have entire charge of the program and shall complete the same with the aid of the President and Chairmen of the various sections at least three months before the annual meeting.

The Executive Committee shall be responsible to the Board of Directors for the proper execution of the work of the Association, the disbursing of moneys, and the conduct of the affairs of the Association between the meetings of the Directors.

SECTION 4. A vacancy which occurs in the Executive Committee during intervals between the annual meetings, may be filled for the unexpired term, by appointment by the President, subject to approval by the Executive Committee.

ARTICLE V — QUORUM

Seven directors shall constitute a quorum of the Board.

ARTICLE VI — MEETINGS

There shall be at least one stated meeting of the Association, at a time and place to be fixed by the Board of Directors. Other meetings of the Association

* Adopted at a special meeting of the Board of Directors held at Philadelphia, January 17, 1920.

Digitized by Google

may be called by the Board of Directors at such times as it shall deem proper. The Board of Directors shall hold a stated meeting once a year during the Annual Meeting of the Association. Other meetings of the Board of Directors may be called by the President, at the request in writing of seven Directors. The Executive Committee shall hold a meeting not later than the day following the Annual Meeting of the Board of Directors at which the officers of the ensuing year are elected. At this organization meeting of the Executive Committee, the newly elected President shall preside and assume his duties for the ensuing year. The Executive Committee shall also hold stated meetings during the months of January and May or June. Other meetings of the Executive Committee may be called by the President at any time or at the request in writing of two members of the Committee.

Article VII — Moneys

The moneys received from membership dues and from all other sources shall be used for defraying the expenses of the Association, and for furthering the objects under the direction of the Board of Directors. The accounts of the Association shall be audited annually by a certified accountant.

Article VIII — Amendment of Constitution

Propositions to amend the Constitution may be presented in writing at any meeting of the Board of Directors or of the Association; they shall be then referred to the Board of Directors for consideration and report. The Board of Directors shall report all propositions for amendment, whether submitted to it originally or by reference, at the meeting of the Association next following, when action may be taken; *provided, however*, that no proposition for amendment shall be voted upon within thirty days after its presentation, or without at least twenty days' notice of the meeting at which it is to come up for consideration, which notice shall set forth the proposed amendment in full. An affirmative vote of two-thirds the members present shall be required for adoption.

Article IX — Amendment of By-Laws

By-Laws may be amended in the same manner as the Constitution, or by a two-thirds vote of the members present at a meeting of the Board of Directors, provided that twenty days' notice in writing has been given of the proposed amendment in the call for the meeting.

Article X — Affiliated Organizations

Affiliated organizations shall pay annual dues of Five Dollars ($5) each, entitling one official representative of each to the status of an individual member, except eligibility to elective offices.

The duties of an official representative of an affiliated organization shall be to promote co-operation in the study and promotion of child hygiene between his own and this Association, presenting to each a brief written report for this purpose.

Digitized by Google

Digitized by Google

MEMBERSHIP

315

Digitized by Google

Digitized by Google

AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

MEMBERSHIP LIST, 1919

HONORARY

France

Bertillon, Dr. Jacques, Paris
Newsholme, Sir Arthur, London

GENERAL MEMBERSHIP

Life Members

Davidson, Mr. Walter, Milwaukee
"Friend," Milwaukee
"Friend," Milwaukee
Gammell, Mr. William, Providence
Gitchell, Miss Katherine, Akron
Hanna, Mr. H. M., Cleveland
Holt, Dr. L. Emmett, New York City
Kieckhofer, Mr. F. A. W., Milwaukee
Horlick, Mr. A. J., Racine
Knox, Mrs. J. H. Mason, Jr., Baltimore
Knox, Miss Katherine Bowdoin, Baltimore
Knox, J. H. Mason, 3rd, Baltimore
Mellon, Mr. A. W., Pittsburgh
Oliver, Mr. Wm. N., Baltimore
Pfister, Mr. Charles F., Milwaukee
Putnam, Mrs. William Lowell, Boston
Russell, Mrs. Marshall, Southampton, L. I.
Schlotman, Mrs. Joseph B., Detroit
Stern, Mr. Walter, Milwaukee
Stotesbury, Mrs. Edward T., Philadelphia
Volker, Mr. William, Kansas City, Mo.
Wade, Mr. and Mrs. J. H., Cleveland
White, Mr. R. J., Baltimore
Winton, Mr. and Mrs. C. J., Minneapolis
I. W.

AFFILIATED MEMBERSHIP

	OFFICIAL DELEGATE
Canada	
HAMILTON	
Babies' Dispensary Guild	Miss Helen Hulme
MONTREAL	
Baby Health Centre, University Settlement	
Baby Welfare Stations (English)	
TORONTO	
Bureau of Child Welfare, Ontario Provincial Board of Health	Miss Mary Power Miss B. Knox
California	
OAKLAND	
Baby Hospital Association	
SAN FRANCISCO	
Baby Hygiene Committee, California Association of Collegiate Alumnae	
SANTA BARBARA	
Visiting Nurse Association	
Connecticut	
NEW HAVEN	
Child Welfare Department of the Visiting Nurse Association	Miss Abbie M. Gilbert Miss Ina Buell
WATERBURY	
Visiting Nurse Association	Miss Emma Sprenkle

Digitized by Google

Delaware

WILMINGTON
Reconstruction Commission of Delaware
State Board of Health

District of Columbia

WASHINGTON
Columbia and Children's Alumnae Association
Diet Kitchen Association — Dr. Harry S. Bernton
Graduate Nurses' Association of the District of Columbia

Georgia

SAVANNAH
Georgia State Association of Graduate Nurses

Hawaii

HONOLULU
Central Committee on Child Welfare
District Nursing Department, Palama Settlement

Illinois

CHICAGO
Elizabeth McCormick Memorial Fund — Dr. Henry F. Helmholz
Infant Welfare Society — Miss Sara B. Place
Lying-in Hospital and Dispensary
Mothers' Aid of the Chicago Lying-in Hospital and Dispensary
Woman's Club
LA SALLE
Infant Welfare Station (Emma Matthieson Chancellor Memorial)

Indiana

EVANSVILLE
Babies' Milk Fund Association — Mrs. Mary C. Trimble
INDIANAPOLIS
Children's Aid Association
SOUTH BEND
Children's Dispensary and Hospital Association

Iowa

CEDAR FALLS
Iowa State Association of Registered Nurses
SIOUX CITY
Child Welfare Department, Organized Welfare Bureau

Kansas

WICHITA
Christian Service League of America

Kentucky

LEXINGTON
Baby Milk Supply Association
LOUISVILLE
Public Health Nursing Association — Miss Sophie C. Nelson

Louisiana

NEW ORLEANS
Child Welfare Association

Maine

AUBURN
Lewiston-Auburn Child Hygiene Association
PORTLAND
Baby Hygiene and Child Welfare Association

Maryland

BALTIMORE — Dr. J. H. M. Knox, Jr.
Babies' Milk Fund Association — Miss M. F. Etchberger
Council, Milk and Ice Fund
Health Department
CUMBERLAND
Baby Welfare Section of Civic Club

Digitized by Google

Massachusetts

BOSTON	
Baby Hygiene Association	Miss Winifred Rand
Boston Children's Aid Society	
Floating Hospital	
Committee on Prenatal and Obstetrical Care of Women's Municipal League	Mrs. Wm. Lowell Putnam
Instructive Visiting Nurse Association	
Massachusetts Milk Consumers' Association	Mrs. Wm. Lowell Putman
Massachusetts Society for the Prevention of Cruelty to Children	
Massachusetts State Department of Health	Dr. M. E. Champion
Maverick Dispensary	
Society for Helping Destitute Mothers and Infants	
BROOKLINE	
Infant Welfare Clinic of the Brookline Friendly Society	
CAMBRIDGE	
Avon Home	
GARDNER	
Massachusetts Branch Nat. Congress of Mothers and Parent-Teacher Association	
HOLYOKE	
Child Welfare Commission	Miss Luella Thomsen
GREAT BARRINGTON	
Visiting Nurse Association	
LEXINGTON	
Unity Lend-a-Hand Society	
SPRINGFIELD	
Visiting Nurse Association	

Michigan

BATTLE CREEK	
Alumnae Association, Battle Creek Sanitarium and Hospital Training School for Nurses	
Michigan Sanitarium and Benevolent Association	
Race Betterment Foundation	
DETROIT	
Babies' Milk Fund	Dr. T. B. Cooley
Children's Free Hospital Association	
Farrand Training School Alumnae Association	
Visiting Nurse Association	Dr. T. B. Cooley
GRAND RAPIDS	
Clinic for Infant Feeding	Miss Margaret Roche
HOLLAND	
Holland Unit, Woman's Committee, Council of National Defense	
PETOSKEY	
Michigan State Nurses' Association	
ST. JOSEPH	
Michigan Children's Home Society	

Minnesota

DULUTH	
Infant Welfare Department, Duluth Consistory Scottish Rite Masons	Miss E. M. Goering
MINNEAPOLIS	
Colonial Chapter, D. A. R.	
Infant Welfare Society	Dr. E. J. Huenekens
Woman's Club	
ST. PAUL	
Baby Welfare Association	Mrs. M. B. Lettice
Minnesota Public Health Association	
State Board of Health	

Missouri

KANSAS CITY	
St. Luke's Child Welfare Club	
ST. LOUIS	
Children's Hospital	
Missouri State Nurses' Association	
Municipal Nurses' Board	
Pediatric Society	
Visiting Nurse Association	

Montana

HELENA	
Montana State Association of Graduate Nurses	

Digitized by Google

New Hampshire

BERLIN	
Berlin Mills Company's District Nurse	

New Jersey

ATLANTIC CITY	
Child Federation	
EAST ORANGE	
Free Public Library	
ELIZABETH	
Visiting Nurse Association	
JERSEY CITY	
Division of Child Hygiene, Health Department	Dr. M. W. O'Gorman
MONTCLAIR	
Board of Health	
MOORESTOWN	
New Jersey Congress of Mothers	
NEWARK	
Babies' Hospital	
ORANGE	
Diet Kitchen of the Oranges	

New York

AMSTERDAM	
Infants' and Child Welfare League	
BATAVIA	
Child Welfare Association	
BROOKLYN	
Children's Aid Society	
Pediatric Society	
Visiting Nurse Association	
BUFFALO	
District Nursing Association	
NEW YORK	
American Nurses' Association	
Babies' Dairy Association	
Babies' Hospital	
Babies' Welfare Association	Miss Mary Arnold
Berwind Free Maternity Clinic	
Children's Welfare Division, Bellevue Hospital Social Service Department	
Henry Street Settlement	
Jacobi Division for Children of the Lenox Hill Hospital	
Metropolitan Life Ins. Co., Industrial Department	
National Child Welfare Association	
National Committee for the Prevention of Blindness	
National League of Nursing Education	Miss Minnie H. Ahrens
National Organization for Public Health Nursing	Miss Zoe La Forge
New York Association for Improving Condition of the Poor	Miss Anne Sutherland Mr. J. C. Gebhart
New York Diet Kitchen Association	
New York Milk Committee	Dr. Philip Van Ingen
New York State Charities Aid Association, Sub-Committee on Mothers and Infants	
RIVERDALE-ON-HUDSON	
Health League	
ROCHESTER	
Bureau of Health	
SYRACUSE	
New York State Nurses' Association	
UTICA	Mrs. D. N. Crouse
Baby Welfare Committee	Mrs. C. C. Luce

North Carolina

RALEIGH	
State Board of Health	Dr. W. S. Rankin

Ohio

CINCINNATI	
Children's Clinic and Baby Milk Fund Association	Mrs. Ada S. Stokes
Jewish Infant Welfare Circle	
Ohio State Association of Graduate Nurses	
Protestant Home for the Friendless and Foundlings	Miss Hazel J. Clark
Visiting Nurse Association	Miss E. K. Ewald

Digitized by Google

CLEVELAND	
Babies' Dispensary and Hospital	Dr. H. J. Gerstenberger
Board of Health	
Day Nursery and Free Kindergarten Association	
Graduate Nurses' Association	
Visiting Nurse Association	
COLUMBUS	
Instructive District Nursing Association	
TOLEDO	
District Nursing Association	
YOUNGSTOWN	
Visiting Nurse Association	
Oregon	
PORTLAND	
Visiting Nurse Association	
Pennsylvania	
BRYN MAWR	
Bryn Mawr College Library	
PHILADELPHIA	
Association of Day Nurseries	
Babies' Hospital	Miss Rena P. Fox
Babies' Welfare Association	Dr. Howard C. Carpenter
Child Federation	Dr. S. McC. Hamill
Children's Hospital	
Pediatric Society	
Starr Centre Association	
The Lighthouse	
READING	
Visiting Nurse Association	
SOUTH BETHLEHEM	
Baby Health Station	
YORK	
Visiting Nurse Association	
Philippine Islands	
MANILA	
Liga Nacional para la Protecion de la Primera Infancia	
Public Welfare Board	
Rhode Island	
PROVIDENCE	
Child Welfare Committee	
Child Welfare Department, R. I. Congress of Mothers and Parent-Teacher Association	Miss Alice Hall
District Nursing Association	Miss Winifred Fitzpatrick
WASHINGTON	
R. I. State Federation of Women's Clubs	
Texas	
DALLAS	Miss May Smith
Civic Federation	
Infants' Welfare and Milk Association, Station No. 1	
Utah	
SALT LAKE CITY	
Ladies' Literary Club	
Virginia	
NORFOLK	
Kings Daughters Visiting Nurses' Association	
RICHMOND	
State Department of Health	
Washington	
SEATTLE	
Child Study Department of the Woman's Century Club	
Health Department	
Wisconsin	
BELOIT	
Visiting Nurse Association	
MILWAUKEE	
Children's Free Hospital	
Infants' Hospital	Miss Nan Dinneen
Maternity Hospital and Free Dispensary Association	
Visiting Nurse Association	
Wisconsin Anti-Tuberculosis Association	
Wisconsin Branch, National Congress of Mothers and Parent-Teacher Association	

Digitized by Google

GENERAL MEMBERSHIP

England

Lane-Claypon, Dr. Janet, Dean, King's College for Women	Campden Hill Road, W. 8, London

China

Hume, Dr. Edward H	The Yale Hospital, Changsha

New Zealand

Baker, Miss	Private Hospital, Pahiatua, Wellington
Jenkins, Mr. William	850 Cumberland St., Dunedin

Chile

Chirgwin, Mr. Henry C	Box 1461, Valparaiso

Cuba

Barrera, Dr. Antonio F	Campanario 58 (altos), Havana

Hawaii

Central Committee on Child Welfare (Affil.)	Honolulu
Frear, Mrs. Walter	1434 Punahon St., Honolulu
District Nursing Department (Affil.)	Palama Settlement, Honolulu
Pratt, Dr. John S. B	P. O. Box 686, Honolulu

Panama

Brakemeier, Miss Louise, Directress of Baby Welfare Work	National Red Cross of Panama

Philippine Islands

Gavieres, Dr. Jesus G	178 Lipa Sampaloc, Manila
Liga Nacional Filipina para la Proteccion de la Primera Infancia (Affil.)	851 Lepanto, Sampaloc, Manila
Public Welfare Board (Affil.)	Fajardo Bldg., Manila

Canada

Babies' Dispensary Guild of Hamilton (Affil.)	12 Euclid Ave., Hamilton, Ontario
Baby Health Centre, University Settlement of Montreal (Affil.)	179 Dorchester St., W. Montreal
Baby Welfare Stations (English) (Affil.)	46 Bishop St., Montreal
Boucher, Dr. S., Medical Officer of Health	Montreal
Brown, Dr. Alan	443 Avenue Road, Toronto
Bureau of Child Welfare, Ontario Provincial Board of Health (Affil.)	Toronto
Chipman, Dr. W. W	285 Mountain St., Montreal
Covernton, Dr. C. F	829 Birks Bldg., Vancouver, B. C.
Jamieson, Dr. Heber C	625 Tegler Blk., Edmonton, Alberta
Lilly, Miss Winifred G	11238-102d Ave., Edmonton
McCullough, Dr. John W., Sec'y. Prov. Board of Health	Toronto
MacMurchy, Dr. Helen, The Inspector of Feeble-Minded	Parliament Bldg., Toronto
Mullin, Dr. R. H., Vancouver General Hospital	Vancouver
Norman, Dr. T. J., Prov. Board of Health	Edmonton, Alberta
Pelletier, Dr. Elzear, Sec'y Board of Health	Montreal
Royer, Dr. B. Franklin, Chief Executive, Massachusetts-Halifax Health Commission	Halifax, N. S.
Russell, Miss Elizabeth, Supt. of Provincial Public Health Nurses, Prov. Board of Health	Winnipeg
Shearer, Dr. John G., Gen'l Sec'y, The Social Service Council of Canada	504 Confederation Life Bldg., Toronto
Smith, Miss Christine, R. N., Supt. Public Health Nurses, Prov. Board of Health	Edmonton, Alberta
Young, Dr. H. E., Sec'y. Prov. Board of Health	Victoria, B. C.

Digitized by Google

Alabama

Dawson, Dr. Harris P.	402 Bell Bldg., Montgomery
Garber, Dr. Jas. R.	300 Woodward Bldg., Birmingham
Meyer, Dr. Jerome	612 Jefferson Co. Bldg., Birmingham
Moultis, Miss Catherine A., R. N.	1000 S. 13th St., Birmingham
Parke, Dr. Thomas D.	415 1st Nat. Bk. Bldg., Birmingham
Snyder, Dr. J. Ross	Woodward Bldg., Birmingham

Arizona

Potts, Miss Amy E.	General Delivery, Bisbee, P. O.

California

Ainley, Dr. Frank C.	1118 Brockman Bldg., San Francisco
Anspacker, Mr. Philip	2901 Pacific Ave., San Francisco
Ash, Dr. Rachel L., University of California Hospital	San Francisco
Baby Hospital Assn. (Affil.)	51st & Dover St., Oakland
Baby Hygiene Committee (Affil.)	323 Haight St., San Francisco
Baldwin, Mr. Alexander R.	932 Mills Bldg., San Francisco
Bentley, Mrs. Charles H.	3198 Pacific Ave., San Francisco
Breed, Miss Josehpine L., R. N.	1441 Avon Park Terrace, Los Angeles
Brown, Dr. Adelaide	Medical Bldg., San Francisco
Brown, Mrs. I. I.	Turner Terrace, San Mateo
Carter, Dr. C. Edgerton	Brockman Bldg., Los Angeles
Coblenz, Mrs. Jules	St. Francis Hotel, San Francisco
Dietrich, Dr. Henry	1618 Gramercy Place, Los Angeles
Fleischner, Dr. E. C.	350 Post St., San Francisco
Goethe, Mr. C. M.	Nicolaus Bldg., Sacramento
Goodrich, Mrs. Chauncey S.	Saratoga
Haynes, Dr. John R.	429 Con. Realty Bldg., Los Angeles
Helbing, Mrs. David	2260 Jackson St., San Francisco
King, Dr. Charles L.	70 S. Euclid Ave., Pasadena
Kohn, Mrs. Simon	3251 Washington St., San Francisco
Kraemer, Mrs. S. J.	3572 Jackson St., San Francisco
Lavenson, Mrs. H. J.	Broadway Apts., Oakland
Layman, Dr. Mary H.	2582 Filbert St., San Francisco
Lewitt, Dr. Wm. B.	210 Post St., San Francisco
Livingston, Mrs. Edward	El Cerrito, San Mateo
Lucas, Dr. Wm. Palmer	2603 Steiner St., San Francisco
McCleave, Dr. Thomas C.	Federal Realty Bldg., Oakland
McDuffie, Mrs. Duncan	156, The Tunnel Road, Berkeley
McIntosh, Mrs. C. K.	Redwood City
Mainwaring, Dr. W. H.	Stanford University, Palo Alto
Myers, Mrs. L. A.	3469 Jackson St., San Francisco
Niebel, Mrs. H. L.	Box No. 126, Palo Alto
Porter, Dr. Langley	240 Stockton St., San Francisco
Powers, Dr. L. M., Commissioner of Health	Los Angeles
Rosenblatt, Mrs. Irving	1780 Broadway, San Francisco
Roth, Mrs. Fred	1770 Pacific Ave., San Francisco
Routledge, Miss Leona, R. N., Marin County Chapter, American Red Cross	San Rafael
Schussler Mr. Henry	285 Geary St., San Francisco
Smith, Dr. Dudley	Claremont Manor, Oakland
Strietmann, Dr. Wm. H.	Federal Realty Bldg., Oakland
Thum, Mr. William	Pasadena
Visiting Nurse Assn. (Affil.)	133 E. Haley St., Santa Barbara
Waterman, Mrs. Jesse	2131 Pierce St., San Francisco
Watters, Dr. Ethel M., Director, Bureau of Child Hygiene, State Board of Health	San Francisco
Willits, Dr. Emma K.	Galen Bldg., San Francisco

Colorado

Amesse, Dr. J. W.	Metropolitan Bldg., Denver
Arneill Mrs. James R.	1055 Penna. St., Denver
Ashley, Mr. Frank R., Western Chemical Mfg. Co.	Denver
Blaney, Mrs. M. H.	909 Grant St., Denver
Gengenbach, Dr. Frank P.	906 Metropolitan Bldg., Denver
Hallack, Miss Kate G.	1701 Sherman St., Denver
Hodger, Mrs. W. V.	1145 Pennsylvania St., Denver
Humphreys, Mrs. A. E.	770 Pennsylvania St., Denver
Kountze, Mrs. Charles B.	1615 Grant St., Denver

Digitized by Google

Mackay, Miss Mary A., R. N., Supt. Visiting Nurse Assn.	536 Temple Court, Denver
McPhee, Mr. W. P.	23rd & Blake St., Denver
Morse, Mrs. Bradish	1555 Sherman St., Denver
Smith, Mr. and Mrs. F. D.	531 N. Cascade Ave., Colorado Springs
Wright, Mr. James W.	345 Gilpin St., Denver

Connecticut

Bartlett, Mrs. C. J.	183 Bishop St., New Haven
Bennett, Mrs. Winchester	76 Everitt St., New Haven
Boyd, Miss Helen F., R. N.	881 Lafayette St., Bridgeport
Bronson, Miss Margaret L.	438 Whitney Ave., New Haven
Bronson, Miss J. C.	438 Whitney Ave., New Haven
Brown, Dr. Walter H., Health Officer	Bridgeport
Carmalt, Dr. W. H.	261 St. Ronan St., New Haven
Child Welfare Dept., of the New Haven Visiting Nurse Assn. (Affil.)	35 Elm St., New Haven
Farnam, Mr. Henry W.	43 Hillhouse Ave., New Haven
Fisher, Prof. & Mrs. Irving	460 Prospect St., New Haven
Goodenough, Dr. E. W.	44 Leavenworth St., Waterbury
Goodrich, Dr. Charles A.	5 Haynes St., Hartford
Gregory, Mrs. A. W.	235 Girard Ave., Hartford
Hale, Mrs. Wm. G.	16 Van Rensselaer Road, Stamford
Linde, Dr. Joseph I.	163 York St., New Haven
Mead, Dr. Kate C.	145 Broad St., Middletown
Platt, Mrs. Orville H.	Washington
Rettger, Mr. Leo F.	198 Edwards St., New Haven
Rockefeller, Mrs. Percy Avery	Greenwich
Slemons, Dr. J. Morris	284 Orange St., New Haven
Stack, Miss Margaret K.	306 Church St., Hartford
Steele, Dr. H. Merriman	226 Church St., New Haven
Steiner, Dr. W. R.	646 Asylum Ave., Hartford
Visiting Nurse Assn. (Affil.)	37 Central Ave., Waterbury
Winslow, Prof. C.-E. A.	Yale Medical School, New Haven

Delaware

Brown, Mrs. J. Thompson	2406 Delaware Ave., Wilmington
Catlin, Mrs. Richard H.	2204 Gilpin St., Wilmington
du Pont, Mrs. Coleman	808 Broome St., Wilmington
du Pont, Mr. Lammot	Box No. 303, Wilmington
Gilpin, Mr. F. L., Jr.	2208 Gilpin Ave., Wilmington
Grant, Mrs. Martha K.	1104 Pennsylvania Ave., Wilmington
Harvey, Mr. LeRoy	907 Broome St., Wilmington
Holladay, Mrs. C. B.	1309 Delaware Ave., Wilmington
Lockwood, Miss Marie T., State Supervisor of Child Welfare	S. Broad, Middletown
McCorkindale, Mr. W. J.	Wilmington
Mathews, Mr. John W.	2201 Gilpin Ave., Wilmington
Perkins, Mrs. I. J. N.	Church Bldg., Wilmington
Reconstruction Commission of Delaware (Affil.)	Church Bldg., Wilmington
State Board of Health (Affil.)	Public Bldg., Wilmington
Trapnell, Rev. Richard W.	Wilmington
Wales, Dr. J. P.	Dela. Ave. & Woodland, Wilmington

District of Columbia

Alsberg, Dr. Carl L.	3443 14th St., N. W., Washington
Babbitt, Miss Ellen C.	1312 30th St., N. W., Washington
Baldwin, Mr. Wm. H.	1415 21st St., Washington
Bradley, Dr. Frances Sage	Children's Bureau, Washington
Clark, Dr. Taliaferro, Asst. Surgeon General, U. S. Public Health Service	2657 War Industries Bldg., Washington
Columbia & Children's Alumnae Assn., (Affil.)	1337 K St., N. W., Washington
Davis, Dr. Wm. H., Chief Statistician for Vital Statistics, Bureau of the Census	Washington
Flannery, Mrs. John S.	2411 California St., Washington
Foote, Dr. John A.	1861 Mintwood Place, Washington
Gardner, Miss Helen W., R. N.	2 Dupont Circle, Washington
Graduate Nurses' Assn. of the District of Columbia (Affil.)	1337 K St., N. W., Washington
Gwynn, Miss Mary	1740 N St., N. W., Washington
Hammond, Mrs. John Hays	2301 Kalorama Road, Washington

Digitized by Google

Heurich, Mrs. Christian	1307 New Hampshire Ave., Washington
Kerr, Dr. J. W., U. S. Public Health Service	Washington
Kober, Dr. George M	1819 Q St., N. W., Washington
La Forge, Miss Zoe, Children's Bureau	Washington
Lappin, Mr. Richard C., Bureau of the Census	Washington
Lathrop, Miss Julia C., Chief, Children's Bureau	Washington
Lewis, Mrs. Fulton	1669 31st St., Washington
Mendenhall, Dr. Dorothy Reed, Children's Bureau	Washington
Miner, Mr. Charles E	1800 Virginia Ave., N. W., Washington
Moran, Dr. John F	2426 Penna. Ave., N. W., Washington
Overton, Mrs. W. S	2 Dupont Circle, Washington
Perkins, Miss Charlotte E., Home for Incurables	Washington
Rude, Dr. Anna E., Children's Bureau	Washington
Saville, Miss Catherine	1420 17th St., N. W., Washington
Sawyer, Dr. Wilbur A	2404 Wisconsin Ave., Washington
Schereschewsky, Dr. J. W., U. S. Public Health Service	Washington
Van Schaick, Dr. John, Jr	1417 Mass. Ave., N. W., Washington
Wall, Dr. Joseph S	2017 Columbia Road, Washington
Washington Diet Kitchen Assn. (Affil.)	1333 G St., N. W., Washington
Willson, Dr. Prentiss	1732 Conn. Ave., Washington

Florida

MacDonnell, Dr. Wm. W., City Health Officer	Jacksonville
Whitford, Dr. Grace	Ozona

Georgia

Georgia State Assn. of Graduate Nurses (Affil.)	Savannah
Mulherin, Dr. Wm. A	1203 Greene St., Augusta
Rhodes, Dr. C. A	Atlanta
Waring, Dr. A. J	3 Perry St., Savannah

Illinois

Abt, Dr. Isaac A	4810 Kenwood Ave., Chicago
Ahrens, Miss Minnie H	180 N. Wabash Ave., Chicago
Anderson, Dr. Edward D	Deerwater St., Lake Forest
Bailey, Mr. E. P	Chicago Savings Bank & Trust Co.
Bassford, Mrs. Lowell C	La Grange
Bell, Mrs. Laird	Hubbard Woods
Blankmeyer, Dr. H. G	"6" & Monroe Sts., Springfield
Block, Mr. E. J	Care of Inland Steel Co., Chicago
Bowen, Mrs. Louise de Koven	1430 Astor St., Chicago
Bowles, Mr. Marion K	Joliet
Breeze, Miss Jessie	3600 Lexington St., Chicago
Burling, Mrs. Edward	Hubbard Woods
Casselberry, Mrs. Lilian H	Lake Forest
Chicago Lying-in Hospital & Dispensary (Affil.)	426 E. 51st St.
Chicago Woman's Club (Affil.)	410 S. Michigan Ave.
Christie, Miss Jessie F., R. N	426 E. 51st St., Chicago
Crowder, Dr. Grace Meigs	5606 Blackstone Ave., Chicago
DeLee, Dr. J. B	5028 Ellis Ave., Chicago
Dodson, Dr. John M	5817 Blackstone Ave., Chicago
Drake, Dr. C. St. Clair, Sec'y, State Board of Health	Springfield
Dunn, Mrs. Morrill	102 Bellevue Place, Chicago
Elizabeth McCormick Memorial Fund (Affil.)	6 N. Michigan Ave., Chicago
Evans, Dr. W. A	7 S. Dearborn St., Chicago
Farwell, Mrs. Fanny D	Lake Forest
Foley, Miss Edna L., Supt., Visiting Nurse Assn.	104 S. Michigan Ave., Chicago
Freer, Mrs. L. H	Hinsdale
Grau, Mrs. Phil. A	718 Elmwood Ave., Wilmette
Grulee, Dr. Clifford G	104 S. Michigan Ave., Chicago
Hallam, Mr. Wirt W	58 W. Washington St., Chicago
Hedger, Dr. Caroline	29 E. Madison St., Chicago
Helmholz, Dr. Henry F	800 Davis St., Evanston
Henderson, Miss B. M., Supt., Children's Memorial Hospital	Chicago
Hess, Dr. Julius H	5574 Indiana Ave., Chicago
Hewitt, Dr. Wm. F	Peoples Gas Bldg., Chicago
Heyworth, Mrs. James O	Lake Forest
Hobson, Dr. Sarah M	22 E. Washington St. Chicago
Hoffmann, Dr. W. H. O	114 E. Walten Place Chicago

Digitized by Google

Houghteling, Mrs. James L.	Winnetka
Hunter, Miss Estelle B., Children's Bureau	542 S. Dearborn St., Chicago
Ide, Mrs. Francis P.	1515 N. Third St., Springfield
Infant Welfare Society of Chicago (Affil.)	104 S. Michigan Ave.
Jenks, Mrs. Wm. S.	745 N. Michigan Ave., Chicago
Jordan, Prof. Edwin O.	University of Chicago
Keef, Mrs. Chauncey	1200 Lake Shore Drive, Chicago
La Salle Infant Welfare Station (Affil.)	La Salle
Levinson, Dr. A.	3304 Douglas Bldg., Chicago
Macleish, Mrs. Andrew	Glencoe
McCormick, Mrs. Harriet H.	50 E. Huron St., Chicago
McCormick, Mr. Harold F.	Stock Exchange Bldg., Chicago
McLaury, Mrs. C. W.	4801 Greenwood Ave., Chicago
Meyer, Mr. Alfred C.	843 W. Adams St., Chicago
Michael, Dr. May	4744 Prairie Ave., Chicago
Milligan, Dr. Josephine	610 W. State St., Jacksonville
Mothers' Aid of the Chicago Lying-in Hospital and Dispensary (Affil.)	Chicago
Perkins, Mrs. H. F.	1301 Astor St., Chicago
Poole, Mrs. Ralph H.	Elsinore, Lake Forest
Purcell, Mrs. J. D.	1412 Astor St., Chicago
Rosenwald, Mr. Jules	Care of Sears, Roebuck & Co., Chicago
Schweer, Mrs. T. J.	Beardstown
Scott, Mrs. Fredk. H.	175 Sheridan Road, Hubbard Woods
Scott, Mrs. Robert L.	144 Greenwood Blvd., Evanston
Shaw, Mrs. Howard Van Doren	1130 Lake Shore Drive, Chicago
Stirling, Miss Dorothy	345 Barry Ave., Chicago
Stulik, Dr. Charles K.	1658 W. 21st St., Chicago
Talbot, Mrs. E. S., Jr.	62 E. Division St., Chicago
Taylor, Mr. Graham	955 Grand Ave., Chicago
Teter, Mr. Lucius	5637 Woodlawn Ave., Chicago
Towne, Mrs. John D.	1004 Greenwood Blvd., Evanston
Traverse, Mrs. W. F.	Niota
Tyson, Mrs. Russell	20 E. Goethe St., Chicago
Ward, Mrs. M. M.	Walbright Hospital, Metropolis
Welles, Mrs. Edward P.	Hinsdale
Welling, Mrs. J. Paul	64 E. Elm St., Chicago
Winterbotham, Mr. John A.	226 S. La Salle St., Chicago
Wright, Miss Ida F., Librarian, Evanston Public Library	Evanston

Indiana

Babies' Milk Fund Assn. (Affil.)	Evansville
Burckhardt, Dr. Louis	Hume-Mansur Bldg., Indianapolis
Children's Aid Assn. (Affil.)	62 Baldwin Block, Indianapolis
Children's Dispensary & Hospital Assn. (Affil.)	South Bend
Hurty, Dr. J. N., Sec'y, State Board of Health	Indianapolis
Rappaport, Mr. Leo M.	822 Law Bldg., Indianapolis
Schweitzer, Dr. A. E.	3623 Salem St., Indianapolis
Trimble, Mrs. Mary C.	Apt. M., Deakin, Evansville

Iowa

Baumgart, Mrs. C. A.	1302 34th St., Des Moines
Braunwarth, Dr. Emma L.	Muscatine
Byfield, Dr. Albert H., State University of Iowa	Iowa City
Child Welfare Dept., Organized Welfare Bureau (Affil.)	City Hall, Sioux City
Iowa State Assn. of Registered Nurses (Affil.)	Cedar Falls
Meanes, Dr. Lenna L.	Securities Bldg., DesMoines
Noland, Dr. C. A.	Ogden
Rust, Dr. Josephine W.	Fort Dodge
Sampson, Dr. F. E.	Creston
Shambaugh, Mrs. Jessie F.	Clarinda
Throckmorton, Dr. J. F.	116 S. Grand St., Chariton
Turner, Dr. M. L.	Equitable Bldg., Des Moines

Kansas

Christian Service League of America (Affil.)	113 N. Lawrence Ave., Wichita
Menninger, Dr. C. F.	727 Kansas Ave., Topeka
Sherbon, Dr. Florence B., Asst. Director, Division of Child Hygiene, State Board of Health	Topeka

Digitized by Google

Kentucky

Baby's Milk Supply Assn. (Affil.)	208 Mechanic St., Lexington
Barbour, Dr. Philip F.	Louisville
Belknap, Mrs. Morris B.	Box 131, R. R. No. 1, Louisville
Haggin, Mrs. Louis L.	Mt. Brilliant Farm, Lexington
Morrison, Dr. J. Rowan	Weissinger-Gaulbert Bldg., Louisville
Morton, Mrs. David	Glenview, Jefferson Co., Louisville
Myer, Dr. Samuel P.	Atherton Bldg., Louisville
Nelson, Miss Sophie C.	215 E. Walnut St., Louisville
Public Health Nursing Assn. (Affil.)	215 E. Walnut St., Louisville
Smith, Mrs. Letchworth	R. F. D. No. 1, Louisville

Louisiana

Behre, Mr. Charles H.	1561 St. Louis St., New Orleans
Borneman, Mrs. Ernst	711 Broadway, New Orleans
Butterworth, Dr. W. W.	Tulane University, New Orleans
Child Welfare Assn. (Affil.)	544 Audubon Bldg., New Orleans
DeBuys, Dr. L. R.	Maison Blanche Bldg., New Orleans
Dowling, Dr. Oscar, President, State Board of Health	New Orleans
Denegre, Mrs. George	Prytania & Eighth Sts., New Orleans
Fenner, Mr. Charles E.	5329 Dryades St., New Orleans
Henry, Mr. Burt W.	Weis Bldg., New Orleans
Kearny, Mr. E. Newton	520 St. Peter St., New Orleans
Newman, Dr. J. W.	3512 St. Charles Ave., New Orleans
Polack, Mr. Robert	6317 St. Charles Ave., New Orleans
Railey, Miss Mary L., Director, Child Welfare Assn.	544 Audubon Bldg., New Orleans
Robin, Dr. W. H., Supt. of Public Health	New Orleans

Maine

Lewiston-Auburn Child Hygiene Assn. (Affil.)	58 Winter St., Auburn
Portland Baby Hygiene & Child Welfare Assn. (Affil.)	City Bldg., Portland
Webster, Dr. F. P.	Y. M. C. A. Bldg., Portland

Maryland

Abercrombie, Dr. R. T.	Homewood Apts., Baltimore
Athey, Mrs. C. N.	100 S. Patterson Park Ave., Baltimore
Babies' Milk Fund Assn. (Affil.)	Baltimore
Baby Welfare Section (Affil.)	Civic Club of Cumberland
Barker, Mrs. L. F.	Stratford Road, Guilford
Belt, Mrs. W. H. G.	613 Reservoir St., Baltimore
Birckhead, Rev. Dr. Hugh	18 W. Read St., Baltimore
Bliss, Mrs. Wm. J. A.	1017 St. Paul St., Baltimore
Bolt, Dr. Richard A.	1211 Cathedral St., Baltimore
Bonaparte, Mr. Charles J.	Centre & Park Ave., Baltimore
Brack, Dr. Charles E.	500 E. 20th St., Baltimore
Buck, Mrs. R. B.	1228 St. Paul St., Baltimore
Carman, Dr. R. P.	1701 N. Caroline St., Baltimore
Cary, Mr. Richard L.	1312 Munsey Bldg., Baltimore
Cone, Dr. Claribel	The Marlborough, Baltimore
Cook, Mrs. George H.	1001 St. Paul St., Baltimore
Corkran, Mrs. Benj. W.	200 Goodwood Gardens, Roland Park
Council, Milk & Ice Fund (Affil.)	Baltimore
Davis, Mrs. John Staige	1200 Cathedral St., Baltimore
Dobbin, Mrs. Thomas M.	1308 Bolton St., Baltimore
Dorsey, Mrs. John R.	1107 St. Paul St., Baltimore
Ellicott, Mrs. Charles	Melvale
Epstein, Mr. Jacob	2532 Eutaw Place, Baltimore
Etchberger, Miss M. F., Supt. Babies' Milk Fund Assn.	Baltimore
Follis, Dr. Richard H.	3 E. Read St., Baltimore
France, Mrs. J. C.	219 W. Lanvale St., Baltimore
Friedenwald, Dr. Julius	1013 N. Charles St., Baltimore
Fulton, Dr. John S., Sec'y, State Department of Health	Baltimore
Gibbs, Mr. John S., Jr.	1026 N. Calvert St., Baltimore
Gibbs, Mrs. Rufus M.	1209 St. Paul St., Baltimore
Greenbaum, Dr. Harry S.	1614 Eutaw Place, Baltimore
Guggenheimer, Miss Aimee	Windsor Hills, Baltimore

Digitized by Google

Hambleton, Mrs. T. Edward	Lutherville
Hamburger, Mrs. Louis P	1207 Eutaw Place, Baltimore
Health Department (Affil.)	Baltimore
Heinemann, Mrs. Milton	2220 Eutaw Place, Baltimore
Hendley, Mrs. Charles W	Guilford
Hochschild, Mrs. Max	Emersonian Apts., Baltimore
Hooker, Dr. Donald R	Upland, Roland Park
Hooper, Mrs. Jas. E	St. Paul & 23rd Sts., Baltimore
Howland, Dr. John	Johns Hopkins Hospital, Baltimore
Hunner, Dr. Guy L	2305 St. Paul St., Baltimore
Hutzler, Mrs. Albert D	Carroll & Delaware Roads, Baltimore
Hutzler, Miss Mabel	1801 Eutaw Place, Baltimore
Jencks, Mrs. Francis M	1 W. Mt. Vernon Place, Baltimore
Katz, Mrs. A. Ray	2532 Eutaw Place, Baltimore
Keyser, Mr. R. Brent	912 Keyser Bldg., Baltimore
Knipp, Master George W	Athol Ave., Baltimore
Knipp, Miss Gertrude B	1821 Park Ave., Baltimore
Knipp, Dr. Harry E	Fremont & Lanvale Sts., Baltimore
Knox, Dr. J. H. Mason, Jr	The Severn Apts., Baltimore
Knox, Mrs. J. H. Mason, Jr	Wendover Road, Guilford
Knox, Miss Katherine Bowdoin	Wendover Road, Guilford
Knox, J. H. Mason, 3rd	Wendover Road, Guilford
Lauer, Mrs. Leon	The Esplanade Apts., Baltimore
Leete, Miss Harriet L	1211 Cathedral St., Baltimore
Levering, Mr. Joshua	706 Keyser Bldg., Baltimore
Lockwood, Dr. Wm. F	8 E. Eager St., Baltimore
McLanahan, Mr. Austin	Alex. Brown & Sons, Baltimore
Marburg, Mrs. Theodore	14 W. Mt. Vernon Place, Baltimore
Murray, Mrs. Edward	Elkridge
Oliver, Mr. Wm. B	Washington Apts., Baltimore
Pleasants, Dr. J. Hall	201 Longwood Road, Roland Park
Poultney, Mrs. Wm. D	505 Park Ave., Baltimore
Ramsay, Mr. John B	1218 St. Paul St., Baltimore
Roten, Mrs. Adolph	2321 Eutaw Place, Baltimore
Ruhrah, Dr. John	Algonquin Apts., Baltimore
Seegar, Dr. J. K. B. E	1529 Park Ave., Baltimore
Seegar, Mrs. J. K. B. E	1529 Park Ave., Baltimore
Semmes, Mrs. John E	10 E. Eager St., Baltimore
Sherwood, Dr. Mary, Chief, Division of Child Hygiene, Health Department	Baltimore
Shoemaker, Mr. S. M	Eccleston
Sonneborn, Mrs. S. B	2420 Eutaw Place, Baltimore
Spicer, Miss Esther	2004 Park Ave., Baltimore
Thom, Mrs. DeCourcy Wright	600 Cathedral St., Baltimore
Tyree, Miss M. Evelyn	1039 N. Calvert St., Baltimore
Walker, Miss M. Evelyn, Supt., Instructive Visiting Nurse Assn	1123 Madison Ave., Baltimore
Welch, Dr. Wm. H	807 St. Paul St., Baltimore
Welsh, Dr. Lilian	The Arundel Apts., Baltimore
Wheeler, Miss Ruth	Goucher College, Baltimore
White, Mr. Richard J	10 South St., Baltimore
Whitridge, Mrs. John	Brooklandville P. O.
Whitridge, Mrs. Susan M	Guilford
Williams, Dr. J. Whitridge	1128 Cathedral St., Baltimore
Wilson, Dr. Karl M	23 W. Chase St., Baltimore

Massachusetts

Adriance, Dr. Vanderpoel	Williamstown
Allen, Dr. Fred H	644 Dwight St., Holyoke
Atchison, Miss Ellen M	165 Hemenway St., Boston
Avon Home (Affil.)	689 Mass. Ave., Cambridge
Baby Hygiene Assn. (Affil.)	296 Boylston St., Boston
Beard, Miss Mary, Director, Instructive District Nursing Assn	561 Mass. Ave., Boston
Bellatty, Mr. Charles E., Director, Mass. Health Commission	525 Boylston St., Boston
Besom, Miss Pansy V., R. N., Chief Child Welfare Supervisors, State Dept. of Health	Boston
Blood, Miss Alice F	3 Concord Ave., Cambridge
Borden, Mr. Richard P	57 N. Main St., Fall River
Boston Children's Aid Society (Affil.)	43 Hawkins St., Boston
Boston Floating Hospital	54 Devonshire St., Boston
Bowditch, Dr. Henry I	461 Marlboro St., Boston
Brayton, Miss Alice	294 Prospect St., Fall River

Digitized by Google

Broughton, Dr. Arthur N.	46 Eliot St., Boston
Campbell, Mrs. John C.	7 Hastings Lane, West Medford
Champion, Dr. Merrill E., Director, Division of Hygiene, State Department of Health	Boston
Child Welfare Commission of Holyoke (Affil.)	34 Sargent St.
Church, Miss Myra H.	City Mission, 31 Jackson St., Lawrence
Churchill, Dr. F. S.	17 Canton Ave., Milton
Clark, Mrs. J. D.	Ashcroft, Sherborn
Clarke, Miss Lillian F.	5 Brimmer St., Boston
Clement, Miss Fannie F. R. N.	275 Warren St., Boston
Codman, Mrs. E. A.	227 Beacon St., Boston
Committee on Prenatal & Obstetrical Care of the Women's Municipal League (Affil.)	49 Beacon St., Boston
Cook, Mrs. Robert H.	2 Foster St., Brookline
Davis, Mr. Michael M., Jr.	25 Bennet St., Boston
Dana, Miss Charlotte W., R. N., Supt., Boston Lying-in Hospital	24 McLean St., Boston
DeNormandie, Dr. Robert L.	357 Marlboro St., Boston
Denny, Dr. Francis P.	111 High St., Brookline
Dickinson, Miss May B., R. N.	Trinity Court, Boston
Dodson, Mr. Fred S., Health Officer	Framingham
Dunn, Dr. Charles Hunter	220 Marlboro St., Boston
Durant, Mrs. Clark T.	Great Barrington
Egan, Miss Sarah A.	54 Devonshire St., Boston
Emerson, Dr. Paul W.	86 Bay State Road, Boston
Emerson, Dr. Wm. R. P.	657 Boylston St., Boston
Emmons, Dr. Arthur B., 2nd	Dover
Eustis, Mrs. F. A.	Canton Ave., Readville
Eustis, Mr. Richard S.	329 Beacon St., Boston
Flanagan, Mrs. Jos. F.	Walnut Park, Newton
Forbes, Mrs. Waldo E.	Milton
Grandin, Mrs. J. Livingston, Jr.	8, The Fenway, Boston
Huntington, Dr. James Lincoln	311 Marlborough St., Boston
Infant Welfare Clinic of the Brookline Friendly Society (Affil.)	Union Bldg., Brookline
Inman, Mrs. Chester M.	35 Midland St., Worcester
Instructive District Nursing Assn. (Affil.)	561 Mass. Ave., Boston
Jackson, Dr. Delbert L.	246 Clinton Road, Brookline
Jackson, Miss Marion C.	88 Marlboro St., Boston
King, Dr. George C.	131 Rock St., Fall River
Lane, Mrs. J. C.	206 Walpole St., Norwood
Lee, Mr. Joseph	101 Tremont St., Boston
Mason, Mr. Charles E.	30 State St., Boston
Mass. Branch Nat. Congress of Mothers & Parent-Teacher Assn. (Affil.)	82 Graham St., Gardner
Mass. Milk Consumers' Assn. (Affil.)	49 Beacon St., Boston
Mass. Society for the Prevention of Cruelty to Children (Affil.)	43 Mt. Vernon St., Boston
Mass. State Department of Health (Affil.)	Boston
Maverick Dispensary (Affil.)	18 Chelsea St., East Boston
Matulaitis, Mrs. Francis	17 Millbury St., Worcester
Morse, Dr. John Lovett	70 Bay State Road, Boston
Newell, Dr. Franklin S.	443 Beacon St., Boston
Page, Dr. Calvin Gates	128 Marlboro St., Boston
Peabody, Miss Gertrude W.	13 Kirkland St., Cambridge
Putnam, Mrs. William Lowell	49 Beacon St., Boston
Rand, Miss Winifred	376 Boylston St., Boston
Reese, Mrs. D. H.	Uxbridge
Riggs, Dr. Austen Fox	Stockbridge
Robbins, Mr. Charles H.	261 Franklin St., Boston
Sanford, Miss Kate I.	Taunton
Shaver, Miss Elisabeth	96 Bay State Road, Boston
Sherwood, Miss Margaret P.	Wellesley College, Wellesley
Smith, Dr. Richard M.	355 Marlborough St., Boston
Society for Helping Destitute Mothers & Infants (Affil.)	5 Brimmer St., Boston
Soule, Miss Edith L.	Hyannis
Springer, Miss Lydia J., R. N.	396 Concord Ave., Belmont
Strong, Miss Anne H., School of Public Health Nursing	561 Mass. Ave., Boston
Talbot, Dr. Fritz B.	311 Beacon St., Boston
Talbot, Mrs. George S.	Fearing Road, Hingham
Talcott, Mrs. George S.	186 Commonwealth Ave., Boston
Tilton, Mrs. Henry C.	6 Chalmers Road, Worcester

Digitized by Google

Tinkham, Mr. George H	11 Pemberton Sq., Boston
Torbert, Dr. James R	252 Marlboro St., Boston
Unity Lend-a-Hand Society (Affil.)	Lexington
Visiting Nurse Assn (Affil.)	Great Barrington
Visiting Nurse Assn. (Affil.)	613 Main St., Springfield
Warren, Mr. Fiske	Priest Cottage, Harvard
Wheeler, Miss Estelle L., R. N	208 Winthrop Road, Brookline
Woodward, Dr. Wm. C., Health Commissioner	Boston
Young, Dr. J. Herbert	19 Baldwin St., Newton

Michigan

Alumnae Assn. of the Battle Creek Sanitarium & Hospital Training School for Nurses (Affil.)	Battle Creek
Babies' Milk Fund of Detroit (Affil.)	924 Brush St., Detroit
Berman, Dr. Harry S	1447 David-Whitney Bldg., Detroit
Bursley, Mrs. J. A	1402 Hill St., Ann Arbor
Butzel, Mr. Fred	1012 Union Trust Bldg., Detroit
Children's Free Hospital Assn. (Affil.)	Antoine and Farnsworth Sts. Detroit
Clinic for Infant Feeding (Affil.)	Louis St. & Markt. Ave., Grand Rapids
Cooley, Dr. Thomas B	Kresge Medical Bldg., Detroit
Cowie, Dr. D. Murray	University of Michigan, Ann Arbor
Farrand Training School Alumnae Assn. (Affil.)	Detroit
Fischer, Dr. A. F	Hancock
Freund, Mrs. Hugo A	26 Chicago Blvd., Detroit
Hardy, Dr. Faith Frances	Metz Bldg., Grand Rapids
Hart, Mrs. Joseph S	261 S. College Ave., Grand Rapids
Hoffman, Miss Charlotte, Supt., Out-Patient Dist. Sanitarium	Battle Creek
Holland Unit, Woman's Com. Council of National Defense (Affil.)	Holland
Holmes, Dr. Arthur D	270 Woodward Ave., Detroit
Hoobler, Dr. B. Raymond	1563 David-Whitney Bldg., Detroit
Johnston, Dr. Collins H	526 Metz Bldg., Grand Rapids
Jones, Dr. Lafon, Dept. of Child Welfare, Board of Health	Flint
Kellogg, Dr. J. H., Supt., Battle Creek Sanitarium	Battle Creek
King, Mrs. Francis	Orchard House, Alma
Kleiner, Mrs. Anthony	1426 Wilcox Park Drive, Grand Rapids
McCool, Mrs. Daniel	425 Prospect Ave., Grand Rapids
McDonald, Dr. Grant	David-Whitney Bldg., Detroit
McGregor, Mrs. Tracy	239 Brush St., Detroit
Martin, Dr. W. F	168 Ann Ave., Battle Creek
Merrifield, Mrs. E. J	Bloomingdale
Michigan Children's Home Society (Affil.)	St. Joseph
Michigan Sanitarium & Benevolent Assn. (Affil.)	Battle Creek
Michigan State Nurses' Assn. (Affil.)	Grand Rapids
Moon, Dr. A. Raymond	1447 David-Whitney Bldg., Detroit
Nichols, Mrs. J. Brooks	225 Larned St., E., Detroit
Nowe, Miss Helen, County Health Director	210 Champion St., Battle Creek
Parker, Mrs. Walter R	285 Seminole Ave., Detroit
Pope, Mrs. Willard	335 Seminole Ave., Detroit
Price, Mrs. O. J	420 Capitol Ave., Lansing
Race Betterment Conference (Affil.)	Battle Creek
Rosenberger, Mrs. Oscar	123 Virginia Ave., Detroit
Ross, Dr. Worth	1563 David-Whitney Bldg., Detroit
Rowland, Dr. R. S	512 Washington Arcade, Detroit
Schlotman, Mrs. Joseph B	1130 Woodward Ave., Detroit
Smith, Dr. Richard R	Metz Bldg., Grand Rapids
Stevens, Mr. Henry G	615 Stevens Bldg., Detroit
Visiting Nurse Assn. (Affil.)	924 Brush St., Detroit
Wilson, Mrs. Charles M	216 College Ave., S. E., Grand Rapids

Minnesota

Adair, Dr. Fred L	730 La Salle Bldg., Minneapolis
Christison, Dr. J. T	642 Lowry Bldg., St. Paul
Colonial Chapter D. A. R. (Affil.)	Minneapolis
Crosby, Miss Caroline M	2105 1st Ave., South, Minneapolis
Crosby, Mr. F. M	Chamber of Commerce, Minneapolis
Greene, Dr. W. P	4006 W. 44th St., Morningside
Hagen, Dr. O. J	Moorhead
Huenekens, Dr. E. J	538 La Salle Bldg., Minneapolis

Digitized by Google

Infant Welfare Department, Duluth Consistory Scottish Rite Masons (Affil.)	Masonic Temple, Duluth
Infant Welfare Society (Affil.)	923 Plymouth Bldg., Minneapolis
Loevinger, Mr. M. S.	1699 Portland Ave., St. Paul
McLaren, Dr. Jennette M.	803 Lowry Bldg., St. Paul
Minnesota Public Health Assn. (Affil.)	Old Capitol, St. Paul
Minnesota State Board of Health (Affil.)	State Capitol, St. Paul
Nash, Mr. Willis K.	203 Essex Bldg., Minneapolis
Osborn, Dr. Lida	Mankato
Ramsey, Dr. W. R.	Lowry Annex, St. Paul
Rodda, Dr. F. C.	614 Syndicate Bldg., Minneapolis
Rosen, Dr. S.	1305 E. Franklin Ave., Minneapolis
Rowe, Dr. Olin Wallace	Fidelity Bldg., Duluth
St. Paul Baby Welfare Assn. (Affil.)	Wilder Bldg., St. Paul
Schlutz, Dr. Fredk. W.	820 Donaldson Bldg., Minneapolis
Sedgwick, Dr. J. P.	University of Minnesota. Minneapolis
Sommers, Mrs. H. S.	794 Linwood Place, St. Paul
Ueland, Mrs. Andreas	Calhoun Blvd. and Richfield Ave., Minneapolis
Walker, Mrs. Archie D.	419 Groveland Ave., Minneapolis
Williams, Mrs. Charles R.	2215 Pillsbury Ave., Minneapolis
Winton, Mrs. C. J.	1324 Mt. Curve Ave., Minneapolis
Winton, Mr. C. J.	Securities Bldg., Minneapolis
Woman's Club of Minneapolis (Affil.)	1526 Harmon Place, Minneapolis

Mississippi

Byrd, Dr. Hiram, Director, Dept. of Hygiene, University of Mississippi	University P. O.
Stokes, Mrs. M. McGehee	Selma, Adams Co.

Missouri

Berger, Dr. Harry C.	906 Waldheim Bldg., Kansas City
Bleyer, Dr. A. S.	706 N. Kingshighway, St. Louis
Brady, Dr. Jules M.	1567 Union Ave., St. Louis
Fouke, Mrs. Philip B.	20 Westmoreland Place, St. Louis
Franklin, Miss Laura I. P., R. N.	R. F. D. No. 4, Columbia
Hempelmann, Dr. T. C.	Metropolitan Bldg., St. Louis
Jeans, Dr. Philip C.	500 S. Kingshighway, St. Louis
Kapprel, Miss Mary C.	2331 S. 6th St., St. Joseph
Lippmann, Dr. Gustave	4668 Berlin Ave., St. Louis
Missouri State Nurses' Assn. (Affil.)	6251 Etzel Ave., St. Louis
Moody, Dr. E. E.	812 Frisco Bldg., Joplin
Municipal Nurses' Board (Affil.)	209 Municipal Courts Bldg., St. Louis
Nagel, Mrs. Charles	44 Westmoreland Place, St. Louis
Neff, Dr. Frank C.	900 Rialto Bldg., Kansas City
Norton, Miss Louise M., R. N.	804 West 33rd, Kansas City
Root, Mr. W. C.	1202 Scarritt Bldg., Kansas City
St. Louis Children's Hospital (Affil.)	St. Louis
St. Louis Pediatric Society (Affil.)	3525 Pine St., St. Louis
St. Luke's Child Welfare Club (Affil.)	Kansas City
Saunders, Dr. Edward W.	1541 S. Grand Ave., St. Louis
Schorer, Dr. Edwin H.	825 Lathrop Bldg., Kansas City
Seibert, Mrs. Louis	University of Missouri, Columbia
Tuttle, Dr. George M.	4917 Maryland Ave., St. Louis
Veeder, Dr. Borden S.	608 Humboldt Bldg., St. Louis
Visiting Nurse Assn. (Affil.)	St. Louis
Volker, Mr. Wm.	308 West 8th St., Kansas City
Wilhelm, Dr. F. E.	1208 Wyandotte St., Kansas City
Zahorsky, Dr. John	4435 N. Pine Blvd., St. Louis

Montana

Cordua, Dr. Olive Brasier	Helena
Montana State Assn. of Graduate Nurses (Affil.)	Helena

Nebraska

Hamilton, Dr. H. B.	846 Brandeis Theatre Bldg., Omaha
McClanahan, Dr. H. M.	466 Brandeis Bldg., Omaha

New Hampshire

Berlin Mills Company's District Nurse (Affil.)	Berlin
Woods, Prof. Erville B.	Dartmouth College, Hanover

Digitized by Google

New Jersey

Adams, Mrs. Thomas B.	34 Hill Crest, Summit
Babies' Hospital (Affil.)	437 High St., Newark
Barton, Miss Susa B., R. N., Supervisor, Child Hygiene Station	138 Allen St., Trenton
Board of Health, (Affil.)	Municipal Bldg., Montclair
Brown, Mrs. Thacher M.	Red Bank
Cammann, Mrs. Oswald N.	40 North Ave., Elizabeth
Chetwood, Miss Virginia M., R. N., Exec. Sec'y, The Bergen County Anti-Tuberculosis Assn.	McFadden Bldg., Hackensack
Child Federation of Atlantic City (Affil.)	2014 Arctic Ave., Atlantic City
Denis, Dr. L.	49 Ridge St., Orange
Diet Kitchen of the Oranges (Affil.)	124 Essex Ave., Orange
Division of Child Hygiene, Health Department, (Affil.)	Jersey City
Fleischmann, Mrs. Charles M.	Morristown
Free Public Library (Affil.)	East Orange
Hall, Mr. John, Health Officer	East Orange
Hoffman, Mr. Fredk. L.	Prudential Ins. Co., Newark
Howell, Mrs. J. W.	211 Ballantine Parkway, Newark
Levy, Dr. Julius, Director, Division of Child Hygiene, Department of Health	Newark
McDonald, Dr. John O.	194 W. State St., Trenton
McDougall, Mr. A. W.	13 Central Ave., Newark
Marvel, Dr. Philip	1616 Pacific Ave., Atlantic City
Miller, Dr. D. J. Milton	127 S. Illinois Ave., Atlantic City
Moore, Mrs. Paul	Hollow Hill Farm, Convent
Murray, Dr. E. W.	91 Washington Ave., Newark
New Jersey Congress of Mothers (Affil.)	Moorestown
Nicholson, Mrs. Wm. H., Jr.	327 S. 2nd St., Millville
Niemeyer, Dr. Charles V.	19 Fourth St., Weehawken
Pierrepont, Mrs. R. S.	Far Hills
Riha, Dr. Wm. W.	25 W. 26th St., Bayonne
Richards, Dr. L. J., Health Officer	Elizabeth
Roebling, Mrs. Karl G.	211 W. State St., Trenton
Schloss, Mr. Milton J.	1516 Broadway, Camden
Shugard, Miss Louise D.	84 Clinton Ave., Newark
Spurr, Mrs. Joseph G.	500 Mt. Prospect Ave., Newark
Stern, Dr. Arthur	224 E. Jersey St., Elizabeth
Stevens, Mr. Richard	Hoboken
Stoddard, Mrs. Ruby G.	2957 Boulevard, Jersey City
Titsworth, Mr. Charles G.	667 Clifton Ave., Newark
Tooker, Miss Mary R.	East Orange
Turner, Mrs. Ella, R. N.	The Aleda Apt., Trenton
Van Sciver, Miss Jessie F.	Walnut St., Beverly
Van Winkle, Mrs. Abram	35 Lincoln Park, Newark
Visiting Nurse Assn. (Affil.)	122 Magnolia Ave., Elizabeth
Warner, Dr. G. Van Voris	76 E. Front St., Red Bank

New Mexico

Tombs, Mr. John, Regional Sec'y, National Tuberculosis Assn. for the Southwestern States	Wright's Trading Post, Albuquerque

New York

Allen, Mrs. Fred W.	8 E. 72nd St., New York City
American Nurses' Assn. (Affil.)	419 W. 144th St., New York
Anderson, Miss Lydia E.	461 Washington Ave., Brooklyn
Babies' Dairy Assn. (Affil.)	8 W. 49th St., New York
Babies' Hospital (Affil.)	657 Lexington Ave., New York
Babies' Welfare Assn. (Affil.)	New York City
Baby Welfare Committee of Utica (Affil.)	Utica
Baker, Dr. S. Josephine, Director, Bureau of Child Hygiene, Department of Health	New York City
Batavia Child Welfare Assn. (Affil.)	6 North St., Batavia
Bayne, Mrs. Howard	830 Park Ave., New York City
Bedinger, Mr. George R., American Red Cross, New York County Chapter	119 W. 40th St., New York City
Benson, Dr. Reuel A.	8 West 49th St., New York City
Berwind Free Maternity Clinic (Affil.)	125 E. 103rd St., New York City
Biggs, Dr. Herman M.	39 W. 56th St., New York City
Blakely, Dr. Stuart B.	69 Walnut St., Binghamton

Digitized by Google

Bliss, Mrs. C. N., Jr.	Westbury, L. I.
Blodgett, Mrs. Wm. A.	Bronxville
Boardman, Mrs. Francis	Riverdale-on-Hudson
Brewer, Dr. J. W., Health Officer	Watertown
Brewster, Mr. George S.	51 Wall St., New York City
Brooklyn Children's Aid Society (Affil.)	72 Schermerhorn St., Brooklyn
Brooklyn Pediatric Society (Affil.)	4402 12th Ave., Brooklyn
Brown, Mr. Robert H.	21 W. 127th St., New York City
Buckley, Mrs. Jonathan	600 Park Ave., New York City
Bureau of Health (Affil.)	Rochester
Button, Dr. Lucius L.	265 Alexander St., Rochester
Calvert, Mrs. John B.	Irvington-on-Hudson
Canfield, Mrs. George F.	344 W. 72nd St., New York City
Carle, Mr. Robert W.	153 Water St., New York City
Children's Welfare Division of Bellevue Hospital Social Service Department (Affil.)	New York City
Coolidge, Dr. Emelyn L.	850 West End Ave., New York City
Crocker, Mrs. E. Masten	169 E. 78th St., New York City
de Victoria, Dr. Cassius L.	965 Lexington Ave., New York City
Degener, Mr. John F., Jr.	354 4th Ave., New York City
Delano, Mr. Moreau	59 Wall St., New York City
Dennett, Dr. Roger H.	120 E. 38th St., New York City
Diefenthaler, Mrs. C. R.	303 W. 91st St., New York City
District Nursing Assn. (Affil.)	181 Franklin St., Buffalo
Downes, Dr. Wm. A.	424 Park Ave., New York City
Draper, Miss Martha L.	125 E. 36th St., New York City
Dunham, Mrs. Edward K.	35 E. 68th St., New York City
Eddy, Mr. Wm. H.	37 Wall St., New York City
Elliott, Dr. Edsall D. B.	Glens Falls
Emerson, Dr. Haven	120 E. 62nd St., New York City
Fearey, Mrs. Morton L.	171 E. 80th St., New York City
Flagler, Mrs. Harry H.	38 Park Ave., New York City
Folks, Mr. Homer	105 East 22nd St., New York City
Ford, Dr. C. E.	25 Broad St., New York City
Freeman, Dr. Rowland G.	211 W. 57th St., New York City
Fronczak, Dr. Francis E., Health Commissioner.	Buffalo
Geister, Miss Janet M.	156 5th Ave., New York City
Geller, Mrs. Fred	Bronxville
Gilder, Mrs. Rodman	898 Madison Ave., New York City
Gillett, Dr. J. R.	197 Elmendorf St., Kingston
Gold, Mr. Cornelius B.	45 W. 35th St., New York City
Goodrich, Miss Annie W.	Teachers' College, New York City
Goodwin, Mrs. Etta R.	144 E. 56th St., New York City
Grant, Mrs. U. S., 3rd	998 Fifth Ave., New York City
Harper, Dr. Paul T.	355 State St., Albany
Hart, Dr. Hastings H., Russell Sage Foundation.	130 E. 22nd St., New York City
Hawkins, Dr. Norman L.	Watertown
Hazard, Mrs. Frederick R.	Syracuse
Heiman, Dr. Henry	64 W. 85th St., New York City
Henry Street Settlement (Affil.)	265 Henry St., New York City
Hess, Dr. Alfred E.	16 West 86th St., New York City
Higgins, Mr. Charles M.	101 9th Ave., Brooklyn
Hill, Mr. Nicholas S., Jr.	112 E. 19th St., New York City
Hirsh, Mrs. A. B.	71 W. 94th St., New York City
Hitch, Mrs. Frederic Delano	Newburgh
Hoe, Mrs. Richard M.	11 E. 71st St., New York City
Holden, Mrs. Edwin B.	323 Riverside Drive, New York City
Holt, Dr. L. Emmett	14 W. 55th St., New York City
Hooker, Dr. Ransom S.	175 E. 71st St., New York City
Hoopes, Mr. Maurice	Glens Falls
Hornblower, Mrs. George S.	755 Park Ave., New York City
Hoyt, Mrs. John S.	900 Park Ave., New York City
Infants & Child's Welfare League (Affil.)	31 Division St., Amsterdam
"A. Jacobi Division for Children of the Lenox Hill Hospital" (Affil.)	New York City
James, Dr. Walter B.	7 E. 70th St., New York City
Johnson, Mrs. Burges	Raymond Ave., Poughkeepsie
Kellogg, Mrs. F. Leonard	118 E. 70th St., New York City
Kerley, Dr. Charles G.	132 W. 81st St., New York City
Kirk, Dr. W. E. J.	1646 E. 8th St., New York City
Kosmak, Dr. George W.	23 E. 93rd St., New York City
Kridel, Miss Elsie W.	135 Central Park West, New York City
La Fetra, Dr. L. E.	113 E. 61st St., New York City
Lambert, Mrs. Adrian V. S.	168 E. 71st St., New York City

Digitized by Google

Leo-Wolf, Dr. Carl G.	481 Franklin St., Buffalo
Liebmann, Mr. Alfred	525 Park Ave., New York City
Ludlum, Dr. Walter D.	362 Marlborough Road, Brooklyn
Lynch, Mr. Frederick	70 Fifth Ave., New York City
McLane, Mr. Thomas S.	47 E. 80th St., New York City
Markoe, Dr. James W.	12 W. 50th St., New York City
Marling, Mr. Alfred E.	35 W. 47th St., New York City
Mathesius, Mrs. Frederick, Jr.	255 W. 91st St., New York City
Metropolitan Life Ins. Co., Industrial Dept. (Affil.)	New York City
Mettler, Mrs. John W.	201 W. 57th St., New York City
Miller, Dr. George N.	Rhinebeck, Dutchess Co.
Mitchell, Mrs. Wesley C.	37 W. 10th St., New York City
Moffett, Dr. Rudolph D.	70 E. 77th St., New York City
National Child Welfare Assn. (Affil.)	70 5th Ave., New York City
National Committee for the Prevention of Blindness (Affil.)	130 E. 22nd St., New York City
National League of Nursing Education (Affil.)	420 W. 118th St., New York City
National Organization for Public Health Nursing (Affil.)	156 Fifth Ave., New York City
New York Assn. for Improving Condition of the Poor (Affil.)	105 East 22nd St., New York City
New York Diet Kitchen Assn. (Affil.)	33 W. 42nd St., New York City
New York Milk Committee (Affil.)	105 E. 22nd St., New York City
New York State Nurses' Assn. (Affil.)	Syracuse
Nichols, Mr. Acosta	25 Broad St., New York City
Olcott, Mr. Dudley	Albany
Parry, Dr. Angenette	749 Madison Ave., New York City
Patterson, Dr. H. S.	130 E. 62nd St., New York City
Perkins, Miss Frances, Commissioner, Industrial Commission, N. Y. State Dept. of Labor	230 Fifth Ave., New York City
Perkins, Mrs. George W.	Riverdale-on-Hudson
Pisek, Dr. Godfrey R.	26 E. 64th St., New York City
Potter, Dr. Philip S.	428 Physicians Bldg., Syracuse
Pratt, Mrs. Mary Seymour	241 Clinton Ave., Brooklyn
Prentice, Mrs. John H.	23 E. 69th St., New York City
Rambo, Dr. Wm. S.	43 N. Plymouth Ave., Rochester
Rennert, Miss Elizabeth, R. N.	63 E. 190th St., New York City
Rice, Mrs. Wm. B.	17 W. 16th St., New York City
Riverdale-Health League (Affil.)	Riverdale-on-Hudson
Robinson, Mrs. Theodore D.	Mohawk, Herkimer Co.
Roosevelt, Mrs. Franklin H.	49 E. 65th St., New York City
Roosevelt, Mrs. Hilborne L.	35 E. 30th St., New York City
Rose, Dr. M. Edgar	940 Park Ave., New York City
Rosenbaum, Mr. S. G.	207 W. 24th St., New York City
Rucker, Dr. Augusta	120 E. 34th St., New York City
Russell, Mrs. Marshall	Southampton, L. I.
Sands, Dr. Georgianna	Port Chester
Sanford, Mrs. F. H.	438 W. 116th St., New York City
Schiff, Mr. Jacob, Kuhn, Loeb & Co.	New York City
Schwarz, Dr. Herman	22 E. 76th St., New York City
Schwarzenbach, Mr. R. J. F.	470 4th Ave., New York City
Shaw, Dr. H. L. K.	361 State St., Albany
Shippen, Miss Ettie	301 Lexington Ave., New York City
Silverman, Dr. A. Clement	Physicians Bldg., Syracuse
Slade, Mr. Francis L.	115 Broadway, New York City
Smith, Dr. Charles H.	66 W. 55th St., New York City
Smith, Dr. Cornell N.	312 Hawley Ave., Syracuse
Solomon, Mrs. Arthur L.	Crestwood
Southworth, Dr. Thomas S.	807 Madison Ave., New York City
Spence, Dr. Ralph E.	Babies, Hospital, New York City
Steinway, Mrs. Theodore	119 E. 39th St., New York City
Stern, Mrs. E. H.	150 W. 79th St., New York City
Stevens, Miss Anne A., R. N., Chief Nurse, Maternity Center Assn.	18 W. 34th St., New York City
Stewart, Mrs. John H. J.	Cold Spring Harbor, L. I.
Stillman, Dr. E. G.	17 E. 72nd St., New York City
Straight, Mrs. Willard	1130 5th Ave., New York City
Strauss, Mr. Frederick, J. V. W. Seligman & Co.	New York City
Straus, Mr. Nathan	27 W. 72nd St., New York City
Sub-Committee for Mothers & Infants, N. Y. State Charities Aid Assn. (Affil.)	105 E. 22nd St., New York City
Terry, Dr. C. E.	The Delineator, New York City

Digitized by Google

Titus, Dr. Henry W	162 Central Ave., New Rochelle
Van Blarcom, Miss Carolyn S	The Delineator, New York City
Vander Bogert, Dr. Frank	111 Union St., Schenectady
Van Ingen, Mr. and Mrs. E. H	9 E. 71st St., New York City
Van Ingen, Dr. Philip	125 E. 71st St., New York City
Visiting Nurse Assn. (Affil.)	78 Schermerhorn St., Brooklyn
Wakeman, Mr. Arthur E	72 Schermerhorn St., Brooklyn
Waldron, Dr. Louis V., Director, Division of Child Hygiene, Bureau of Health	City Hall, Yonkers
Wallace, Dr. Charlton	507 Madison Ave., New York City
Walter, Mr. Wm. I	52 Broadway, New York City
Waters, Miss Ysabella C	174 S. Goodman St., Rochester
White, Mrs. Alex. M	52 Remsen St., Brooklyn
White, Miss Frances E	2 Pierrepont Place, Brooklyn
Wilcox, Dr. Herbert B	39 East 75th St., New York City
Wile, Dr. Ira S	230 W. 97th St., New York City
Willcox, Prof. Walter F	Cornell University, Ithaca
Williams, Mrs. Louise B., R. N., Supt., Child Welfare Assn	209 Ellicott St., Batavia
Williams, Dr. Linsly R	884 Park Ave., New York City
Wiseman, Dr. Joseph R	705 E. Genesee St., Syracuse
Witherby, Mrs. E. C	P. O. Box 2, Syracuse
Wynkoop, Dr. E. J	401 James St., Syracuse

North Carolina

Bisch, Dr. Louis F	Haywood Bldg., Asheville
Carlton, Dr. R. L., Health Officer	Winston-Salem
Faison, Dr. I. W	409 Independence Bldg., Charlotte
Owsley, Dr. Paul O	14 Edgemont Road, Asheville
State Board of Health (Affil.)	Raleigh
Rankin, Dr. W. S., Sec'y, State Board of Health	Raleigh

Ohio

Abbott, Mr. Gardner T	1215 Williamson Bldg., Cleveland
Babies' Dispensary & Hospital of Cleveland (Affil.)	2500 E. 35th St., Cleveland
Baldwin, Mr. Arthur D	1025 Garfield Bldg., Cleveland
Baldwin, Mrs. Arthur D	Lake Shore Drive, Cleveland
Bentley, Mrs. Robert, Pres., Visiting Nurses Assn.	718 Wick Ave., Youngstown
Bill, Dr. Arthur	2082 E. 96th St., Cleveland
Board of Health (Affil.)	Cleveland
Brown, Mr. Alexander C	1625 Hazel Drive, Cleveland
Calfee, Mr. R. M	1608 Williamson Bldg., Cleveland
Children's Clinic and Baby Milk Fund Assn	124 W. McMicken Ave., Cincinnati
Cleveland Day Nursery & Free Kindergarten Assn. (Affil.)	2050 E. 96th St., Cleveland
Cushing, Mrs. Edward F	9619 Lake Shore Blvd., Cleveland
Cushing, Mrs. Wm	2908 Euclid Ave., Cleveland
Devereux, Mrs. M. F	Nutwood Farms, Wickliffe
Eisenman, Mr. Charles	1530 Guardian Bldg., Cleveland
Feiss, Mrs. Paul L	11452 Euclid Ave., Cleveland
Furrer, Dr. Arnold F	1110 Euclid Ave., Cleveland
Galt, Mrs. Wm., Jr	Glendale, Cincinnati
Garfield, Mr. Abram	Lake Shore Blvd., Sta. H., Cleveland
Garfield, Mrs. Abram	Lake Shore Blvd., Cleveland
Garfield, Mrs. James R	3328 Euclid Ave., Cleveland
Gerstenberger, Dr. H. J	1940 Noble Road, East Cleveland
Gitchell, Miss Katherine	Akron
Goehle, Dr. Otto L	465 Rose Bldg., Cleveland
Graduate Nurses' Assn. (Affil.)	2100 E. 40th St., Cleveland
Grandin, Mrs. G. W	Magnolia Drive, Cleveland
Greene, Mr. & Mrs. Edward B	10,831 Magnolia Drive, Cleveland
Hamann, Dr. C. A	416 Osborn Bldg., Cleveland
Hanna, Mr. H. M	2417 Prospect Ave., Cleveland
Hanna, Mrs. Howard M., Jr	Station H., Cleveland
Hanson, Mr. J. M., Sec'y, Charity Organization Society	102 E. Front St., Youngstown
Harvey, Mr. M. C	215 Cuyahoga Bldg., Cleveland
Harvey, Mr. P. W	9619 Lake Shore Blvd., Cleveland
Herrick, Mrs. F. C	2211 Harcourt Drive, Cleveland

Digitized by Google

Hollingshead, Dr. Frances M., Director, Division of Child Hygiene, State Board of Health, Page Hall, O. S. U. Campus	Columbus
Hoover, Dr. C. F	702 Rose Bldg., Cleveland
Hord, Mrs. John	1929 E. 75th St., Cleveland
Howell, Dr. J. Morton	Riebold Bldg., Dayton
Instructive District Nursing Assn. (Affil.)	276 East State St., Columbus
Ireland, Mrs. Robert L	Lake Shore Blvd., Cleveland
Jewish Infant Welfare Circle, Care of Mrs. Robert Senior, Chr. (Affil.)	415 Clinton St., Cincinnati
Kingsley, Mr. Sherman C., Sec'y, Welfare Federation	Cleveland
Lamb, Dr. Frank H	940 E. McMillan St., Cincinnati
Latham, Dr. Edgar M	1051 Dorr St., Toledo
Mather, Mrs. A. S	2605 Euclid Ave., Cleveland
Mather, Mr. Samuel	Western Reserve Bldg., Cleveland
Metcalf, Dr. Maynard M	Oberlin
Miller, Dr. N. C	144 E. Tiffin St., Fostoria
Morgenroth, Dr. S	202 Everett Bldg., Akron
Ohio State Assn. of Grad. Nurses (Affil.)	Cincinnati
Otis, Mr. Charles A	Cuyahoga Bldg., Cleveland
Peskind, Dr. A	2414 E. 55th St., Cleveland
Peters, Dr. A. O., Commissioner of Health	412 Forest Ave., Dayton
Phillips, Mrs. Wilbur C., Exec. Sec'y, National Social Unit Organization	1820 Freeman Ave., Cincinnati
Phillips, Dr. John	1021 Prospect Ave., Cleveland
Prescott, Mrs. O. W	3085 Fairmount Blvd., Cleveland
Protestant Home for the Friendless and Foundlings (Affil.)	433 N. Court, Cincinnati
Rachford, Dr. B. K	323 Broadway, Cincinnati
Rees, Mrs. William	3624 Euclid Ave., Cleveland
Schmidlapp, Mr. J. G	Cincinnati
Sellenings, Dr. O. H	137 E. State St., Columbus
Silver, Mrs. M. T	1725 Magnolia Drive, Cleveland
Sullivan, Miss Selma	7218 Euclid Ave., Cleveland
Thomas, Dr. J. J	1110 Euclid Ave., Cleveland
Toledo District Nurse Assn. (Affil.)	1517 Monroe St., Toledo
Tough, Miss Mary	4 Church St., Athens
Tracy, Mrs. James J., Sr	2245 Harcourt Dr., Cleveland
Visiting Nurse Assn. of Cincinnati (Affil.)	220 W. 7th Ave., Cincinnati
Visiting Nurse Assn. of Cleveland (Affil.)	612 St. Clair Ave., N. E., Cleveland
Visiting Nurse Assn. (Affil.)	102 E. Front St., Youngstown
Wade, Mr. J. H	3903 Euclid Ave., Cleveland
Wade, Mrs. Jeptha	3903 Euclid Ave., Cleveland
Wason, Mrs. Charles W	9209 Euclid Ave., Cleveland
White, Mrs. W. T	Station H., Cleveland
Williams, Mr. Edward M	601 Canal Road, N. W., Cleveland
Wolfenstein, Dr. S	1624 Compton Road, Cleveland Heights
Wyckoff, Dr. C. W	503 Osborn Bldg., Cleveland

Oklahoma

Taylor, Dr. W. M	509 State Nat. Bank Bldg., Oklahoma City

Oregon

Bilderback, Dr. J. B	903 Corbett Bldg., Portland
Moore, Dr. Charles U	814-815 Corbett Bldg., Portland
Visiting Nurse Assn. (Affil.)	428 Medical Bldg., Portland

Pennsylvania

Anders, Dr. J. M	1605 Walnut St., Philadelphia
Arbuthnot, Dr. Thomas S., Dean, School of Medicine, University of Pittsburgh	Pittsburgh
Atlee, Mrs. John L	129 East Orange St., Lancaster
Babies' Hospital (Affil.)	Llanerch, Delaware Co.
Babies' Welfare Assn. (Affil.)	1615 Sansom St., Philadelphia
Baby Health Station (Affil.)	Second and Polk Sts. So., Bethlehem
Bacon, Dr. Emily P., Children's Hospital, Mary Drexel Home	2100 S. College Ave., Philadelphia
Batt, Dr. Wilmer R., Registrar of Vital Statistics, State Dept. of Health	Harrisburg
Blitzstein, Dr. Rosalie M	4122 Girard Ave., Philadelphia

Digitized by Google

Bok, Mrs. Edward	Swastika, Merion Station
Bradley, Dr. Wm. N	1638 S. Broad St., Philadelphia
Brazier, Miss E. Josephine	1803 Pine St., Philadelphia
Brown, Mr. James Crosby, Brown Brothers & Co.	Fourth and Chestnut Sts., Philadelphia
Bruner, Dr. Henry G	542 North 11th St., Philadelphia
Bryn Mawr College Library (Affil.)	Bryn Mawr
Caldwell, Miss F. F	1705 Locust St., Philadelphia
Caner, Mrs. Harrison K	1707 Walnut St., Philadelphia
Carpenter, Dr. Howard Childs	1805 Spruce St., Philadelphia
Cartin, Dr. H. J	100 Main St., Johnstown
Cheston, Dr. Radcliffe	Chestnut Hill, Philadelphia
Child, Dr. Dorothy, Chief, Division of Child Hygiene, State Dept. of Health	Harrisburg
Child Federation (Affil.)	200 S. Juniper St., Philadelphia
Children's Hospital of Philadelphia (Affil.)	Bainbridge, Eighteenth and Fitzwater Sts., Philadelphia
Clark, Mr. Herbert L	321 Chestnut St., Philadelphia
Clayton, Miss S. Lillian, Philadelphia General Hospital	34th and Pine Sts., Philadelphia
Clothier, Mrs. Wm. Jackson	Wynnewood
Cogill, Dr. Lida Stewart	1831 Chestnut St., Philadelphia
Coleman, Miss Fanny B	Lock Box No. 238, Lebanon
Coles, Dr. Stricker	2103 Walnut St., Philadelphia
Colket, Miss Mary Walker	258 S. 18th St., Philadelphia
Colton, Mrs. Sabin W., Jr	Bryn Mawr
Coon, Mr. C. Melvin	214 S. Main St., Athens
Cross, Mr. Albert	608 Chestnut St., Philadelphia
Davis, Dr. Edward P	250 S. 21st St., Philadelphia
Dick, Dr. H. L. H	21 N. 9th St., Darby
Dohan, Mrs. Joseph M	3712½ Chestnut St., Philadelphia
du Pont, Mrs. Pierre S	Kennett Square, Chester Co.
Eaton, Dr. Percival J	715 N. Highland Ave., EE. Pittsburgh
Edwards, Dr. Ogden M., Jr	5607 Fifth Ave., Pittsburgh
Erb, Mrs. F. O	113 McKinley Ave., Lansdowne
Evans, Mrs. George B	223 N. 34th St., Philadelphia
Fife, Dr. Charles A	2038 Chestnut St., Philadelphia
Fleisher, Mr. Arthur Adler	2301 Green St., Philadelphia
Fox, Miss Rena P., R. N., Supt., Babies' Hospital	Philadelphia
Forbes, Mrs. Roger S	68 E. Johnson St., Germantown
Furbush, Dr. C. Lincoln	4300 Locust St., Philadelphia
Fussell, Dr. M. Howard	2035 Walnut St., Philadelphia
Gucker, Mr. F. T	Real Estate, Trust Bldg., Philadelphia
Hall, Dr. Herbert E	Nat'l Bank of Fayette County Bldg., Uniontown
Hamill, Dr. S. McC	1822 Spruce St., Philadelphia
Hartley, Dr. Harriet L., Chief, Division of Child Hygiene, Bureau of Health	Philadelphia
Hatfield, Dr. Charles J	2008 Walnut St., Philadelphia
Hollopeter, Dr. W. C	1411 Spruce St., Philadelphia
Houghton, Miss Judith, Babies' Hospital	Lianerch
Houston, Mr. James W	1235 Liberty Ave., Pittsburgh
Jeanes, Mrs. Henry S	2012 Spruce St., Philadelphia
Jenkins, Mrs. Charles F	Kitchen's Lane, Germantown
Johnson, Mr. Roswell H	306 State Hall, Pittsburgh
Jones, Dr. Eleanor C	1531 North 15th St., Philadelphia
Judson, Dr. Charles F	1003 Spruce St., Philadelphia
Kech, Dr. Aug. S	1205 16th St., Altoona
Kelley, Dr. Maude M., Woman's Hospital	2137 N. College Ave., Philadelphia
Kraker, Dr. Florence E	1225 Spruce St., Philadelphia
Lamplugh, Miss Bertha A	317 S. Lawrence St., Philadelphia
Lea, Mr. Arthur H	960 Drexel Bldg., Philadelphia
Leconte, Dr. Robert G	1530 Locust St., Philadelphia
Leebron, Dr. J. D	5814 Chestnut St., Philadelphia
Lefcoe, Dr. C. Henry	1420 N. 13th St., Philadelphia
Levi, Dr. I. Valentine	1736 N. 16th St., Philadelphia
Lighthouse, Care of Mrs. R. R. P. Bradford (Affil.)	146 W. Lehigh Ave., Philadelphia
Liveright, Mrs. I. Albert	2030 Spring Garden St., Philadelphia
Loeb, Mr. Howard A	431 Chestnut St., Philadelphia
Lowenburg, Dr. Harry	1927 N. Broad St., Philadelphia
Luders, Miss Anne E	The Alexandra, 42nd St. and Chester Ave., Philadelphia
Luders, Miss Emma B	The Alexandra, 42nd St. and Chester Ave., Philadelphia

Digitized by Google

Ludington, Mrs. Charles H.	Ardmore
MacCarroll, Dr. D. Randall	1906 Chestnut St., Philadelphia
McClintock, Mr. Andrew T.	73 W. Southampton St., Wilkes-Barre
Madeira, Miss Edith, R. N.	The Gladstone, Philadelphia
Mayer, Mr. Clinton O.	Bailey Bldg., 1218 Chestnut St., Philadelphia
Mellon, Mr. A. W.	5052 Forbes St., Pittsburgh
Mercur, Dr. Wm. H.	5th Ave. and St. James St., Pittsburgh
Meyers, Dr. E. L.	239 S. Franklin St., Wilkes-Barre
Miehle, Miss Edith	571 E. Norwegian St., Pottsville
Miller, Dr. Robert T., Jr.	1226 Murray Hill Ave., Pittsburgh
Mills, Dr. H. Brooker	1411 Spruce St., Philadelphia
Moxey, Dr. Albert F., Supervisor, School Medical Inspectors & Pathologist, Widner Memorial Home	12 E. Mt. Pleasant Ave., Mt. Airy, Philadelphia
Neff, Dr. Joseph S.	106 S. 21st St., Philadelphia
Old, Dr. Herbert	Hamilton Court, West Philadelphia
Peck, Dr. Elizabeth L.	4113 Walnut St., Philadelphia
Philadelphia Association of Day Nurseries (Affil.)	1300 Spruce St., Philadelphia
Philadelphia Pediatric Society (Affil.)	Philadelphia
Preston, Mrs. Francis Metcalf	205 W. 9th St., Erie
Price, Dr. Henry T.	Westinghouse Bldg., Philadelphia
Reckefus, Dr. Charles H., Jr.	506 N. 6th St., Philadelphia
Robinson, Miss Cora A.	Bradford, McKean Co.
Robinson, Mrs. Louis N.	Swarthmore
Robinson, Dr. Wm. Duffield	2012 Mt. Vernon St., Philadelphia
Ross, Dr. Fred E.	132 W. 9th St., Erie
Scattergood, Mrs. J. Henry	Villa Nova
Schamberg, Dr. Jay F.	1922 Spruce St., Philadelphia
Schrade, Dr. Anna M.	716 Sassafras St., Erie
Scott, Dr. Z. R.	Westinghouse Bldg., Pittsburgh
Sibley, Miss Florence	135 S. 18th St., Philadelphia
Sinclair, Dr. John F.	4103 Walnut St., Philadelphia
Sinnett, Miss Mary E.	1816 S. Rittanhouse Sq., Philadelphia
Spiegle, Dr. Grace E.	2115 N. 12th St., Philadelphia
Starr Centre Association (Affil.)	725-727 Lombard St., Philadelphia
Stotesbury, Mrs. Edward	1925 Walnut St., Philadelphia
Sutton, Mrs. Isaac C.	5409 Overbrook Ave., Philadelphia
Tallant, Dr. Alice Weld	1200 Spruce St., Philadelphia
Taylor, Dr. Marianna	St. Davids
Thomas, Mrs. George C.	Chestnut Hill, Philadelphia
Titus, Dr. Paul	Ellsworth & Graham Sts., Pittsburgh
Tracy, Dr. Martha	5138 Wayne Ave., Philadelphia
Trainer, Mr. T. Woodward, Supt., Dept. of Public Safety	Chester
Ulrich, Dr. Katharine	413 E. Broad St., Chester
Visiting Nurse Assn. (Affil.)	429 Walnut St., Reading
Visiting Nurse Assn. (Affil.)	47 E. Market St., York
Watt, Miss Eleanor C.	3605 Chestnut St., Philadelphia
Whiton, Miss Lydia A., Meadville City Hospital	Meadville
Wiles, Mrs. Thomas S.	Haverford Court, Haverford
Williams, Mr. Ellis D.	560 Drexel Bldg., Philadelphia
Wolf, Mr. & Mrs. Albert	330-340 N. 12th St., Philadelphia
Wolf, Mr. Louis	330-340 N. 12th St., Philadelphia
Woodward, Mrs. A. M.	The Normandie, 36th & Chestnut Sts., Philadelphia
Wright, Miss Nellie B., Care of Chamber of Commerce	Beaver Falls
Wright, Dr. J. W., Health Officer, Board of Health	Erie
Ziegler, Dr. Charles Edward	4716 Bayard St., Pittsburgh

Rhode Island

Chapin, Dr. Charles V., Supt. of Health	Providence
Child Welfare Committee of Providence (Affil.)	Providence
Child Welfare Dept., R. I. Congress of Mothers & Parent-Teacher Assn. (Affil.)	96 Alumni Ave., Providence
Gammell, Mr. William	P. O. Box 1436, Providence
Gardiner, Dr. Elizabeth M., Director, Division of Child Welfare, State Board of Health	Providence
Hazard, Miss Caroline	Peace Dale
Providence District Nursing Assn. (Affil.)	109 Washington St., Providence

Digitized by Google

Putnam, Dr. Helen C.	Rhode Island Ave., Providence
R. I. State Federation of Women's Clubs (Affil.).	Washington
Stone, Dr. Ellen A., Supt. of Child Hygiene	280 Waterman St., Providence

South Carolina

Dodd, Mrs. Ruth A., R. N., Director, Bureau of Child Hygiene, State Board of Health	Columbia
Hines, Dr. Edgar A.	Seneca
Jordan, Dr. Fletcher	Bank of Commerce Bldg., Greenville
Pollitzer, Dr. R. M.	72 Wentworth St., Charleston

South Dakota

McCauley, Dr. C. E.	Citizens Bank Bldg., Aberdeen

Tennessee

Wilson, Dr. Owen H.	1620 West End Ave., Nashville

Texas

Civic Federation of Dallas (Affil.)	1306½ Commerce St., Dallas
Infants' Welfare & Milk Association of Dallas, Station No. 1 (Affil.)	Corinth & Austin Sts., Dallas
Muller, Miss Maud, R. N.	R. R. 7, Box 91, San Antonio
Palmerton, Mrs. Helen, Nurse-in-Charge, Infants' Welfare & Milk Assn.	1925 Cedar Springs, Dallas
Smith, Miss May F., Supt., Dallas Baby Hospital.	Dallas
Swenson, Mr. J. R., Dept. of Education, North Texas State Normal College	Denton

Utah

Beatty, Dr. T. B., Sec'y, Utah State Board of Health	Salt Lake City
Cooper, Miss Blanche, Experiment Station, Utah Agriculture College	Logan
Ladies' Literary Club of Salt Lake City (Affil.)	Salt Lake City
Siegel, Mrs. Rachel U.	630 East 1st South St., Salt Lake City

Vermont

Handy, Mrs. George W.	Beulah Farm, West Hartford
Hawley, Dr. Donly C.	204 Pearl St., Burlington

Virginia

Brumfield, Dr. W. A., Director, Division of Venereal Diseases of Va.	Sherwood Cottage, Richmond
Brydon, Dr. Mary E., Director, Bureau of Child Welfare, State Board of Health	Richmond
Fowlkes, Dr. Frank V.	Burkeville
Grandy, Dr. Charles R.	Dickson Bldg., Norfolk
Gray, Dr. Benj. H.	1303 Grove Ave., Richmond
Harrison, Dr. V. W.	401 N. Allen Ave., Richmond
Johnson, Dr. Bertha F.	Kilbourne Farm, Bon Air
Kings Daughters Visiting Nurses' Assn. (Affil.)	300 W. York St., Norfolk
Newton, Dr. McGuire	1010 Floyd Ave., Richmond
Royster, Dr. L. T.	205 Taylor Bldg., Norfolk
Spilman, Mrs. B. D.	Elway Hall, Warrenton
State Department of Health (Affil.)	Richmond

Washington

Child Study Dept. of the Women's Century Club, Care of Mrs. Clara D. Lounsbury, Treas. (Affil.).	432 Malden Ave., Seattle
Health Department (Affil.)	Public Safety Bldg., Seattle
Manning, Dr. John B.	217 Cobb Bldg., Seattle

West Virginia

Colwell, Miss Rachel H., Dept. of Domestic Science, University of W. Va.	Morgantown
Cornwell, Mr. John J.	Charleston
Fleming, Dr. Carter, S.	308½ Main St., Fairmont
Hartley, Dr. German S.	Eagle
Shawkey, Dr. Arthur A.	Charleston

Wisconsin

Allis, Mr. Louis	133 Stewart St., Milwaukee
Barth, Dr. G. P.	2120 Grand Ave., Apt. 8, Milwaukee

Digitized by Google

Beloit Visiting Nurse Assn., Care of Miss Elizabeth T. Eldred, Sec'y (Affil.)	1216 Bushnell St., Beloit
Children's Free Hospital (Affil.)	219 Tenth St., Milwaukee
Davidson, Mr. Walter	3227 Highland Blvd., Milwaukee
Dearholt, Dr. Hoyt E., Exec. Sec'y. Wisconsin Anti-Tuberculosis Assn	Milwaukee
Elser, Mr. Albert C	633 Lake Drive, Milwaukee
Fellman, Dr. G. H	701 Majestic Bldg., Milwaukee
Friend, Mrs. J. E	Hartland
Gramling, Dr. Henry J	911 Layton Blvd., Milwaukee
Gray, Dr. A. W	1330 Wells Bldg., Milwaukee
Heinemann, Dr. Paul G	Woodworth
Horlick, Mr. J. A	Racine
Jurss, Dr. George J	425½ 32nd St., Milwaukee
Kastner, Dr. A. L	3430 St. Paul St., Milwaukee
Kaumheimer, Dr. G. J	Room 208, Berlin Arcade Bldg., Milwaukee
Kieckhofer, Mr. F. A. W	Edgewood Farms, Pewaukee
Koehler, Dr. John P	1161 27th St., Milwaukee
McMinn, Miss Amelia	803 Frederick Ave., Milwaukee
Marlatt, Prof. Abby L., University of Wisconsin	Madison
Marshall, Miss Elizabeth G	40 Prospect Ave., Milwaukee
Milwaukee Infants Hospital (Affil.)	477 Bradford Ave., Milwaukee
Milwaukee Maternity Hospital & Free Dispensary Assn. (Affil.)	554 Fourth St., Milwaukee
National Congress of Mothers and Parent-Teacher Associations, Wisconsin Branch (Affil.)	Milwaukee
Nunnemacher, Mrs. Emilie	268 Knapp St., Milwaukee
Orton, Dr. Susanne	Darlington
Pabst, Mrs. Frederick	Oconomowoc
Pfeifer, Dr. F. J	New London
Pfeifer, Dr. Henry A	Jackson
Pfister, Mr. Charles F	1210 First Nat. Bank Bldg., Milwaukee
Schlesinger, Mr. Ferdinand	477 Lafayette Place, Milwaukee
Schuchardt, Mrs. W. H	268 Knapp St., Milwaukee
Smith, Dr. S. M. B	315 Third St., Wausau
Stern, Mr. Walter	525 Astor St., Milwaukee
Stoelting, Dr. C. W	Oconto
Taylor, Dr. J. Gurney	1330 Wells Bldg., Milwaukee
Visiting Nurse Assn. (Affil.)	214 W. Water St., Milwaukee
Wisconsin Anti-Tuberculosis Assn., Health Service Bldg. (Affil.)	558 Jefferson St., Milwaukee

CONTRIBUTORS TO SPECIAL FUNDS

1919

California

Brown, Dr. Adelaide	San Francisco

Illinois

Casselberry, Mrs. Lilian H	Lake Forest
Elizabeth McCormick Memorial Fund	Chicago

Maryland

Black, Mr. Van Lear	Baltimore
Bland, Mr. John R	Baltimore
"Friend"	Baltimore
Johnston, Mrs. Josiah Lee	Baltimore
Knox, Dr. J. H. M., Jr	Baltimore
Koppelman, Mr. Charles H	Baltimore
Rogers, Miss Julia	Baltimore
White, Mr. Richard J	Baltimore

Massachusetts

Putnam, Mrs. William Lowell	Boston

Missouri

Tuttle, Dr. George M	St. Louis

New York

Van Ingen, Dr. Philip	New York

Pennsylvania

Jenkins, Mrs. Charles F	Germantown
Strassburger, Mrs. Ralph Bourne	Gwynedd Valley

Digitized by Google

INDEX

Adair, F. L., M. D. Discussion, 80, 86, 102
Adolescence, 26, 169
Affiliated Baby Welfare Stations (English) Montreal, 258
Affiliated Societies:
  Membership list, 317
  Reports of, 253
Ahrens, Minnie H., R. N. Discussion, 82, 114, 204, 206
Alameda County, California, Baby Hospital Assn., 260
Alias hygiene. Thomas A. Storey, M. D., Ph.D., 182
  Discussion, 185
Anderson, Paul V., M. D. Discussion, 177
Arnold, Mary. Report, 293
Assn. for Improving the Condition of the Poor, New York City, 190, 193, 295

Babbitt, Ellen C. What England and Scotland are doing for children of preschool age, 143
Babies' Dispensary Guild, Inc., Hamilton, 258
Babies Hospital, Philadelphia, 302
Babies' Milk Fund Assn.:
  Baltimore, 275
  Detroit, 286
  Evansville, 267
  Louisville, 271
Babies' Welfare Assn.:
  Montreal, 258
  New York, 293
  Philadelphia, 302
Baby Hospital Assn. of Alameda County, California, 260
Baby Hygiene Assn., Boston, 279
Baby Hygiene Com. of the Assn. of Collegiate Alumnae, San Francisco, 261
Baby Milk Supply Fund Assn., Lexington, 270
Bailey, Olive M. Report, 270
Baker, S. Josephine, M. D., D. P. H. Discussion, 83, 119
  Presidential address, 21
Baltimore Babies Milk Fund Assn., 275
Barth, G. P., M. D. Discussion, 81, 82, 165, 180
Bernton Harry S., M. D. Report, 264
Binghamton, N. Y., Child Welfare Assn., 293
Birth registration, 49, 242
Births, notification of, act, 144
Bisch, Louis F., M. D. Discussion, 179
Blindness, prevention of, 294
Bolt, Richard A., M. D., Gr. P. H. How may the general practitioner be interested in the modern socio-medical program for infancy? 106
Boston:
  Baby Hygiene Assn., 279
  Society for the Prevention of Cruelty to Children, 280
  State Department of Health, Child Hygiene Activities, 280
Bradley, Frances Sage, M. D. Discussion, 103, 115, 222, 235, 242
Breast feeding (see also infant feeding clinics 78, 119, 132, 248
Breast Feeding Bureau at Minneapolis, report of, 89
British grants:
  For home helps, 126
  Maternity and child welfare, 146
Brown, Adelaide, M. D. The permanent results of Children's Year for the neglected period of childhood in San Francisco, 157
Brydon, M. E., M. D. Discussion, 167, 224
Bureau of Child Hygiene, Division of Health, Cleveland, 298
Bureau of Child Hygiene, Health Department, Milwaukee, 307
Bureau of Child Welfare, Provincial Board of Health, Toronto, 259
Burritt, Baily B. Report, 295
Butler, Major Harry B., D. D. S., Oral Hygiene, 186
  Discussion, 192

Caldwell, Florence M. Report, 284
Carpenter, Howard Childs, M. D. Discussion, 168
Carr, Genevieve M. Report, 299
Carstens, C. C. Report, 280
Chalmers, A. K., M. D., 143, 152
Champion, Merrill E., M. D. Discussion, 191 244, 251
  Maternal benefits, 71
  Report, 280
Chicago Lying-in Hospital and Dispensary, 266
Child, Dorothy, M. D. Discussion, 205
Child Hygiene Activities, State Dept. of Health, Boston, 280
Child hygiene and rural nursing, 207, 237
Child hygiene, divisions of, 21, 258. (See also reports of affiliated societies V)
Child hygiene program, 28
Child Welfare Assn.:
  Binghamton, 293
  Holyoke, 283
  New Orleans, 273
  Toronto, 259
  Wilmington, 264
Child Welfare Assn., Binghamton, N. Y., 293
Child Welfare Association, New Orleans, 273
Child Welfare Bureau of Province of Ontario, 259
Child Welfare Commission, Holyoke, 283
Child Welfare Division, Bellevue Hospital Social Service Bureau, New York City, 294
Child welfare, international conferences on, Children's Bureau, Washington, 1919, 22, 39
Child welfare movement, 21, 119
Child Welfare Reconstruction Commission, Wilmington, Del., 264

Digitized by Google

Child Welfare Special, The. Janet Geister, R. N., 214
Discussion:
Bradley, Frances Sage, M. D., 222
Schweitzer, Ada E., M. D., 222
Brydon, M. E., M. D., 224
Rude, Anna, M. D., 224
Lockwood, Marie, 224
Children's Aid Assn., Indianapolis, 269
Children's Bill, British, 230
Children's Bureau, 29, 39, 76. See also Children's Year
Children's Clinic and Baby Milk Fund Assn. of Cincinnati, 296
Children's Dispensary and Hospital Assn., South Bend, 270
Children's year, 26, 28, 89, 157, 197, 214, 237 245
Children's year campaign (see reports of affiliated societies VI)
Christie Jessie F. Report, 266
Cincinnati Children's Clinic and Baby Milk Fund Assn., 296
Clark, Taliaferro, M. D. Chairman, Session on School Age and Adolescence, 171
Discussion, 80, 82, 117, 166
Cleveland Bureau of Child Hygiene, Division of Health, 298
Cleveland Day Nursery and Free Kindergarten Assn., 299
Clinics: (See also reports of affiliated societies IV, VI, IX)
Dental, 162, 163, 186, 190, 229, 281, 291
For infant feeding and infant welfare, 115, 116, 117, 287
Minnesota rural, 245
Motorized, 214, 251
Nutritional, 153, 154, 261, 291
Obstetrical, 266
Post-graduate work in North Carolina, 115
Prenatal, 250, 266 (see pp. 35–79)
Rural, 118, 229, 245, 291
Traveling, 116, 291
Well baby, 116, 260
Clinic for Infant Feeding, Grand Rapids, 287
Committees:
American Child Hygiene Assn., 8
Constitution and By-Laws, 311
Cooley, T. B., M. D. Discussion, 104
Cooper, George M., M. D. Discussion, 234, 235
Rural, dental and surgical clinics, 229
Crum, Frederick S. Discussion, 85, 164, 205

Dallas Graduate Nurses' Baby Camp and Hospital, 306
Day nurseries, 146, 198, 292, 297, 299
Day Nursery and Free Kindergarten Assn., Cleveland, 299
De Normandie, R. L., M. D. Discussion, 81
Prenatal work in Massachusetts, 64
Detroit Babies Milk Fund, 286
Diet Kitchen Assn.:
Washington, 264
Dillon, Mrs. Jean T. Discussion, 203, 244
District Nursing Assn., Providence, 306
District Nurses Assn., Toledo, 301
Division of Child Hygiene, Health Bureau, Jersey City, 292
Dodd, Ruth A. Opportunities of the rural public health nurse, 237
Duluth Consistory, Scottish Rite Masons, Infant Welfare Dept., 289

Education:
Act, British, 148
Courses in pediatrics, 106–121
Minnesota plan, 113
North Carolina experiment, 113, 115
Of the general practitioner, 106–121
Physical, 181, 182
Preventive medicine, training for, 203, 250, 261
Public health nursing, training for, 206, 282
Teaching syllabus on child hygiene, 116
Through state and county medical societies, 115, 116
Education act, British, 148
Evansville, Ind., Babies' Milk Fund Assn., 267

Faison, I. W., M. D. Discussion, 120, 165
Father, advice to, 128
Financial statement, 15
Fitzpatrick, Winifred. Discussion, 63, 201, 202
Report, 306
Foote, John A., M. D. An Infant hygiene campaign of the second century, 129
Discussion, 104
Foreign-born, work among, 128
Fox, Rena P. Report, 302
Franklin, Laura. Discussion, 204

Gebhart, John C. Discussion, 190, 193
Geister, Janet M., R. N. Discussion, 213
The child welfare special, 214
General outline of welfare work for the child from two to six years, from the viewpoint of the city. Sara B. Place, R. N., 197
Discussion:
Fitzpatrick, Winifred L., 201, 202
Place, Sara B., R. N., 202
Leo-Wolf, Karl G., M. D., 202
Dillon, Mrs. Jean T., 203
Helmholz, Henry F., M. D., 203
Sherbon, Florence B., M. D., 203, 206
Franklin, Laura, 204
Ahrens, Minnie H., 204, 206
Schweitzer, Ada E., M. D., 204
Crum, Fred S., 205
Child, Dorothy, M. D., 205
Peters, A. O., M. D., 205
General outline of welfare work for the child from 2 to 6 years from the viewpoint of the rural community. Virginia Knox Kimble, R. N., 207
Discussion:
Geister, Janet M., 213
Gerstenberger, H. J., M. D. Discussion, 103, 119, 163, 235, 251
Gilbert, C. M. Report, 262
Goering, Estella M. Report, 289
Graduate Nurses' Baby Camp and Hospital, Dallas, 306
Grand Rapids Clinic for Infant Feeding, 287
Great Barrington Visiting Nurse Assn., 282

Hamill, S. McC., M. D. Discussion, 63, 104, 116, 168
Hamilton Babies' Dispensary Guild, Inc., 258
Health Bureau, Division of Child Hygiene, Jersey City, 292

Digitized by Google

Health centers, 118, 205, 250, 252, 261
Health conferences, children's (see clinics, health centers and reports of affiliated societies), 252
Health insurance, 33
Health visitors, 144, 147
Helmholz, Henry F., M. D. Discussion, 162, 202
Help in the home for the mother with a young baby. Helen MacMurchy, M. D., 122
  Discussion:
    Putnam, Mrs. Wm. Lowell, 128
    Waldron, M. D., 128
Hill, H. W., M. D., D. P. H. Report, 290
Hines, E. A., M. D. Discussion, 84.
Hoffman, W. H. O., M. D. Discussion, 84, 117, 168
  Observations on the supervision of the pre-school age in the large city, 153
Holyoke Child Welfare Commission, 283
Home finding, 269
Home helps, 48, 122, 128
Home helps, provision for in British maternity and child welfare schemes, 126
Honolulu Women's Central Committee on Child Welfare, 265
Housing and child health, 145
How may the general practitioner be interested in the modern socio-medical program for infancy?
  Bolt, Richard A., M. D., Gr. P. H., 106
  Wall, Jos. S., M. D., 110
  Discussion:
    Ahrens, Minnie H., 114
    Talbot, Fritz B., M. D., 114
    Peters, A. O., M. D., 115
    Bradley, Frances Sage, M. D., 115
    Tallant, Alice Weld, M. D., 115
    Shaw, H. L. K., M. D., 116
    Hamill, S. McC., 116
    Hoffmann, Walter H. O., M. D., 117
    Clark, Taliaferro, M. D., 117
    Perkins, Mrs. I. J. N., 117
    Knox, J. H. M., Jr., M. D., 118
    Huenekens, E. J., M. D., 118
    Gerstenberger, H. J., M. D., 119
    Baker, S. Josephine, M. D., 119
    Faison, I. W., M. D., 120
    Wall, Jos. S., M. D., 121
Howell, J. Morton, M. D. Discussion, 165
  The Minnesota rural clinic, 245
Huenekens, E. J., M. D. Discussion 105, 118, 252
Hulme, Helen. Report, 258
Hunt, Mrs. Seth Bliss. Report, 294
Huntington, James Lincoln, M. D. Chairman. Session on Prenatal and Maternal Care, 35
  Chairman's address, 37
Hygiene:
  Mental, 172, 185
  Oral, 186
  Maternal and infant, 76

Illegitimacy, 294
Indianapolis, Children's Aid Association, 269
Infancy, how may the general practitioner be interested in the modern medico-social program for, 106
Infant care (see reports of affiliated societies IV, IX)
Infant Care, Session on, 87
Infant feeding, 132, 239, 248. (See also reports of affiliated societies IV)
Infant hygiene campaign of the second century. John A. Foote, M. D., 129
Infant mortality, prevention of in Villiers le Duc, 243
Infant mortality, 25, 30, 80, 81. (See also reports of affiliated societies IX, and Vital Statistics)
Infant Welfare Dept. Duluth Consistory Scottish Rite Masons, 289
Infant Welfare Society, Minneapolis, 93
International conferences on child welfare, Children's Bureau, Washington, 1919, 39

Jersey City Health Bureau, Division of Child Hygiene, 292

Kimble, Mrs. Virginia Knox, R. N. General outline of welfare work for the child from 2 to 6 years from the viewpoint of the rural community, 207
Kirby, Paul D. Report, 269
Knox, J. H. M., M. D. Discussion, 81, 118
  Report, 275
Koehler, John P. Report, 307

Laforge, Zoe, R. N. Program of the national organization for public health nursing, 1919–1920, 225
Lathrop, Julia C. The imperative need of safe-guarding maternity and infancy, 29
Legislation:
  Children's Bill, British, 230
  Education act, British, 148
  Hawaiian, re notification of feebleminded, 265
  Maternity benefits, 77
  Maternal and infant hygiene, 76
  Maternity and child welfare acts, British, 146
  Midwives' act, British, 144
  Notification of births act, British, 144
  Physical training, 184
  Protection of maternity and infancy, 31
  Re medical inspection of schools in North Carolina, 230
  Re public health nursing, 226
Leo-Wolf, Karl G., M. D. Discussion, 164, 202
Lexington Baby Milk Supply Fund Assn., 270
Lobenstine, Ralph W., M. D. The maternity centre idea adapted to the need of New York City, 39
Lockwood, Marie. Discussion, 224
Louisville, Ky., Babies' Milk Fund Assn., 271
Lucas, Wm. Palmer, M. D. What England and Scotland are doing for children of pre-school age, 143

McKenzie, Sir W. Leslie (see 143–152)
MacMurchy, Helen, M. D. Help in the home for the mother with a young baby, 122
Massachusetts Society for the Prevention of Cruelty to Children, Boston, 280
Massachusetts State Department of Health, Boston, Child Hygiene Activities, 280
Maternal care, 35
Maternal and child welfare activities, British government subsidy of, 146
Maternal and child welfare acts, England and Wales, 146

Digitized by Google

Maternal and infant hygiene, 76
Maternal benefits. Merrill E. Champion, M. D., 71
Discussion:
Smith, Richard M., M. D., 78, 85
Clark, Taliaferro, M. D., 80, 82
Adair, F. L., M. D., 80, 86
Barth, G. T., M. D., 81, 82
Knox, J. H. M., M. D., 81
De Normandie, R. L., M. D., 81
Sherbon, Florence, M. D., 82
Waldron, L. V., M. D., 82
Ahrens, Minnie H., 82
Baker, S. Josephine, M. D., 83
Ross, Worth, M. D., 84
Hines, E. A., M. D., 84
Hoffmann, W. H. O., M. D., 84
Crum, Frederick S., 85
Place, Sara B., 85
Stevens, Anne A., 86
Maternal mortality, 24, 30, 66, 69, 72, 83
Maternal welfare, 80, 86
Maternity and child welfare, British grants for, 126, 147
Maternity and infancy, care of. Proposed plan, 31
Maternity and infancy, the imperative need of safe-guarding, 29
Maternity benefits:
Australian, 25
England, France, Italy, Australia, 74
Saskatchewan, Canada, 75
United Kingdom, 33
Maternity and child welfare acts (England and Wales), 146
Maternity care, 39
Maternity center, 39, 43, 54
Maternity Centre Association, the work of the, Anne A. Stevens, R. N., 43
Membership list, 315
Mental hygiene, 172, 185
Mental hygiene, with special reference to children of pre-school and school age, 176
Midwives, 42, 44, 45, 48, 51, 66, 69, 83, 84, 85, 132, 241
(See also reports of affiliated societies IX)
Midwives act, 144
Milk (see reports of affiliated societies VIII)
Milwaukee Bureau of Child Hygiene, Health Department, 307
Minneapolis Infant Welfare Society, 93
Minnesota Public Health Assn., St. Paul, 290
Minnesota rural clinic, the. Huenekens, E. J., M. D., 245
Discussion:
Rude, Anna, M. D., 249
Gerstenberger, H. J., M. D., 251
Champion, Merrill E., M. D., 251
Sherbon, Florence B., 252
Huenekens, E. J., 252
Miner, C. E. Discussion, 181
Montreal, Affiliated Baby Welfare Stations (English), 258
Morgan, Mrs. Discussion, 244
Motorized dispensaries, 118, 214
Municipal Visiting Nurses, St. Louis, 291

National Committee for the Prevention of Blindness, New York City, 294
National Organization for Public Health Nursing, 225
Nelson, Sophie C. Report, 271
New Haven Visiting Nurse Assn., 262
New Orleans Child Welfare Assn., 273
Newsholme, Sir Arthur (see 143–152)
Newton, McGuire, M. D. Discussion, 164
New York City:
Babies' Welfare Assn., 293
Child Welfare Division, Bellevue Hospital Social Service Bureau, 294
Notification of births act, 144
Nursing and Social Work, session on, 195
Nursing, rural, 207, 237
Nursing visits:
Routine for pre-natal care, 57
Routine for post-natal care and follow up, 61, 83
Nutritional clinics, 153, 154, 161, 164, 200, 205. (See also Pre-school age, and reports of affiliated societies IV)

Observations on the supervision of the pre-school age in the large city. Walter H. O. Hoffmann, M. D., 153
Obstetrical clinics, 266
Ochsner, R. J., M. D. Report, 298
Ophthalmia neonatorum, 69
Opportunities of the rural public health nurse to develop child hygiene. Ruth A. Dodd, R. N., 237
Discussion:
Bradley, Frances Sage, M. D., 242
Champion, Merrill E., M. D., 244
Dillon, Mrs. Jean T., 244
Morgan, Mrs., 244
Oral hygiene. Major Harry B. Butler, D. D. S., U. S. Public Health Service, Washington, 186
Discussion:
Gebhart, John C., 190, 193
Sherbon, Florence B., M. D., 191
Schweitzer, Ada E., M. D., 191
Rude, Anna, M. D., 191
Champion, Merrill E., M. D., 191
Butler, Major Harry E., D. D. S., 192

Pediatrics, post-graduate work in (see discussion on "How may the general practitioner be interested, etc., 106; see also Education)
Bellevue Hospital, 120
College of Physicians and Surgeons, 120
Cornell University, 120
Johns Hopkins, 118
Leland Stanford Univ., 261
New York Univ., 120
North Carolina Univ., 115, 118, 120
Rush Medical College, 117
University of California, 261
Western Reserve Univ., 119
Perkins, Mrs. I. J. N. Discussion, 117
Report, 264
Permanent results of Children's Year for the neglected period of childhood, in San Francisco, Adelaide Brown, M. D. 157
Discussion:
Rand, Winifred, 160
Smith, Richard, M. D., 161
Helmholz, Henry F., M. D., 162
Wall, Jos. S., M. D., 162
Gerstenberger, H. J., M. D., 163
Shaw, H. L. K., M. D., 163
Leo-Wolf, Karl G., M. D., 164
McGuire, Newton, M. D., 164
Schweitzer, Ada E., M. D., 164
Crum, Fred. S., 164
Waldron, L. V., M. D., 164
Falson, I. W., M. D., 165
Barth, G. P., M. D., 165

Digitized by Google

Permanent Results of Children's Year—*Continued*
Discussion — *Continued*
Howell, J. M., M. D., 165
Clark, Taliaferro, M. D., 166
Brydon, M. E., M. D., 167
Hamill, S. McC., M. D., 168
Carpenter, Howard Childs, M. D., 168
Hoffmann, Walter H. O., M. D., 168
Peters, A. O., M. D. Discussion, 115, 205
Philadelphia Babies' Hospital, 302
Physical training, 184
Place, Sara B., R. N. Discussion, 85, 202. General outline of welfare work for the child from two to six years, 197
Post-nantal care, 61, 83
Power, Mary. Report, 259
Powers, Grover F., M. D. Report, 275
Pre-natal and Maternal Care, Session on, 35.
Pre-natal care, 37, 39, 61, 73, 79–86, 238, 243.
Pre-natal clinics, 43, 62, 64.
Pre-natal nursing, 82
Pre-natal nursing visits, routine of, 57
Pre-natal work in Massachusetts. Robert L. DeNormandie, M. D., 64
Pre-school age (see also reports of affiliated societies IV, IX)
Clinics, 246
Communicable diseases of, 149
Defects of, 148, 155, 157, 158, 162, 211, 219, 247
Mental hygiene, with reference to, 176
Welfare work for, 197–213
What England and Scotland are doing for, 143
Pre-school age, observations on the supervision of, in the large city, 153
Pre-school Age, Session on, 141
Pre-school age, the permanent results of Children's Year in San Francisco for the neglected period of, 157
Pre-school age, what England and Scotland are doing for children of, 143
Pre-school clinics, 246
Presidential address. S. Josephine Baker, M. D., D. P. H., 21
Preventive medicine, see pediatrics
Program of the national organization for public health nursing 1919–1920. Zoe Laforge, R. N., 225
Providence District Nursing Assn., 306
Psychiatry with special reference to children of school age. Walter L. Treadway, P. A. Surgeon, U. S. P. H. Service, Washington, D. C., 172
Discussion:
Anderson, Paul V., M. D., 177
Royster, L. T., M. D., 178
Stone, Ellen, M. D., 178
Smart, L. G., M. D., 179
Bisch, Louis F., M. D., 179
Sherbon, Florence B., M. D., 179
Barth, G. P., M. D., 180
Miner, C. E., 181
Public Health Assn., St. Paul, Minn., 290
Public health nursing, 117, 281. (See also visiting nurse assns.)
Public health nursing, program of the National Organization, 225
Public health nursing, training for, 206
Puerperal sepsis, notification of, 69
Putnam, Mis. William Lowell. Discussion, 128
Railey, Mary L. Report, 273
Rand, Winifred. Report, 279
Discussion, 102, 160
Record forms, 62
Report of Breast Feeding Bureau at Minneapolis. J. P. Sedgwick, M. D., 89
Discussion:
Smith, Richard, M. D., 100
Shaw, H. L. K., M. D., 102
Rand, Winifred, 102
Adair, F. L., M. D., 102
Gerstenberger, H. J., M. D., 103
Bradley, Frances Sage, M. D., 103
Hamill, S. McC., M. D., 104
Cooley, T. B., M. D., 104
Foote, John A., M. D., 104
Huenekens, E. J., M. D., 105
Wall, Jos. S., M. D., 105
Reports:
Affiliated societies, 253
Minutes of annual meeting, 11
Clerical work, 17
Treasurer, 15
Rickets, 163
Roche, Mary Margaret. Report, 287
Rosencranz, M. E. Report, 267
Ross, Worth, M. D. Discussion, 63, 84
Royster, L. T., M. D. Discussion, 178
Rude, Anna, M. D. Discussion, 191, 224, 249
Rural clinics, 68, 118, 229
Rural, dental and surgical clinics. Geo. M. Cooper, M. D., 229
Discussion:
Cooper, George M., M. D., 234, 235
Bradley, Frances Sage, M. D., 235
Gerstenberger, H. J., M. D., 235
Rural nursing, 207, 237
Rural obstetrics, 238
Rural problems, 207, Session on, 227
Russell, Ann D. Report, 286

Salmon, Jeanette B. Report, 293
San Francisco:
Baby Hygiene Com. of the Assn. of Collegiate Alumnæ, 261
Permanent results of Children's Year, 157
St. Louis Municipal Visiting Nurses, 291
School age, 26
School age and adolescence, Session on, 179
School age and adolescence (see reports of affiliated societies IX)
School age, defects of, 178, 186, 190, 231
School age, psychiatry with special reference to children of, 172
Schweitzer, Ada E., M. D. Discussion, 164, 191, 204, 222
Sears, W. C. Report, 282
Sedgwick, J. P., M. D. Report of Breast Feeding Bureau at Minneapolis, 89
Sessions:
Infant care, 87
Nursing and Social Work, 195
Pre-natal and Maternal Care, 35
Pre-School Age, 161
Rural Problems, 227
School Age and Adolescence, 169
Shaw, H. L. K., M. D. Discussion, 102, 116, 163
Sherbon, Florence, M. D. Discussion, 82, 179, 191, 202, 206, 252
Smart, L. G., M. D. Discussion, 179
Smith-Hughes law, 32
Smith-Lever law, 32
Smith, Richard M., M. D. Discussion, 78, 85, 100, 161

Digitized by Google

Social hygiene, 32
Social service:
  Bellevue Hospital, child welfare division, 294
  Cincinnati General Hospital, 297
Social work, 195
Society for the Prevention of Cruelty to Children, Boston, Mass., 280
Socio-medical program for infancy, how may the general practitioner be interested, 106
South Bend Children's Dispensary and Hospital Assn., 270
Sprenkle, Emma. Report, 263
Springfield Visiting Nurse Assn., 284
State Department of Health, Boston, child hygiene activities, 280
Steere, Mrs. Frederick E. Report, 265
Stevens, Anne A., R. N. The work of the Maternity Centre Association. New York City, 43. Discussion, 86
Stokes, Mrs. Ada S. Report, 296
Stone, Ellen, M. D. Discussion, 178
Storey, Thomas A., M. D., Ph.D. Alias hygiene, 182
Styles, W. A. L., M. D. Report, 258

Talbot, Fritz B., M. D. Discussion, 114
Taliant, Alice Weld, M. D. Discussion, 115
  Vice-Chairman, Session on Pre-natal and Maternal Care, 35
Teaching syllabus on child hygiene, 116
The imperative need of safe-guarding maternity and infancy. Julia C. Lathrop, 29
The maternity center idea adapted to the need of New York City. Ralph W. Lobenstine, M. D., 39
The work of the Maternity Center Association. New York City. Anne A. Stevens, R N. 43
  Discussion:
    Fitzpatrick, Winifred, 63
    Ross, Worth, M. D., 63
    Hamill, S. McC., M. D., 63
Thompson, Luella. Report, 283
Toledo District Nurses Assn., 301
Toronto Bureau of Child Welfare, Provincial Board of Health, 259
Trimble, Mrs. Mary C. Report, 267
Treadway, Walter L., P. A. Surgeon, U. S. P. H. Service. Psychiatry, with special reference to children of school age, 172
Treasurer's report, 15

Van Cleve, Edward M. Report, 294
Van Winkle, Anna. Report, 261
Venereal diseases, 80
Villiers le Duc, prevention of infant mortality in, 243
Visiting Nurse Assn.:
  Great Barrington, 282
  New Haven, 262
  Providence, 306
  St. Louis, 291
  Springfield, 284
  Toledo, 301
  Waterbury, 263
Vital statistics, 24, 65, 71, 90, 95, 144, 223, 242. (See also reports of affiliated societies IX)

Wages, effect of advance upon standards of living. (See reports of affiliated societies VII)
Waldron, L. V., M. D. Discussion, 82, 128, 164
Wall, Jos. S., M. D. Discussion, 105, 121 162
  How may the general practitioner be interested in the modern socio-medical program for infancy? 110
Washington Diet Kitchen Assn., 264
Waterbury Visiting Nurse Assn., 263
Well-baby clinics, 116, 260, 291
Well-baby conferences. (See reports of affiliated societies IV, VI, IX)
Wet nursing, 132, 135
What England and Scotland are doing for children of pre-school age. Ellen C. Babbitt, 143
What England and Scotland are doing for children of pre-school age. Wm. Palmer Lucas, M. D., 143
Wilmington Child Welfare Reconstruction Commission, 264
Women's Central Committee on Child Welfare, Honolulu, 265
Working housekeepers, 48
Wright, Bertha. Report, 260

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

UNIVERSITY OF MICHIGAN
3 9015 06991 2932

Digitized by Google

Digitized by Google